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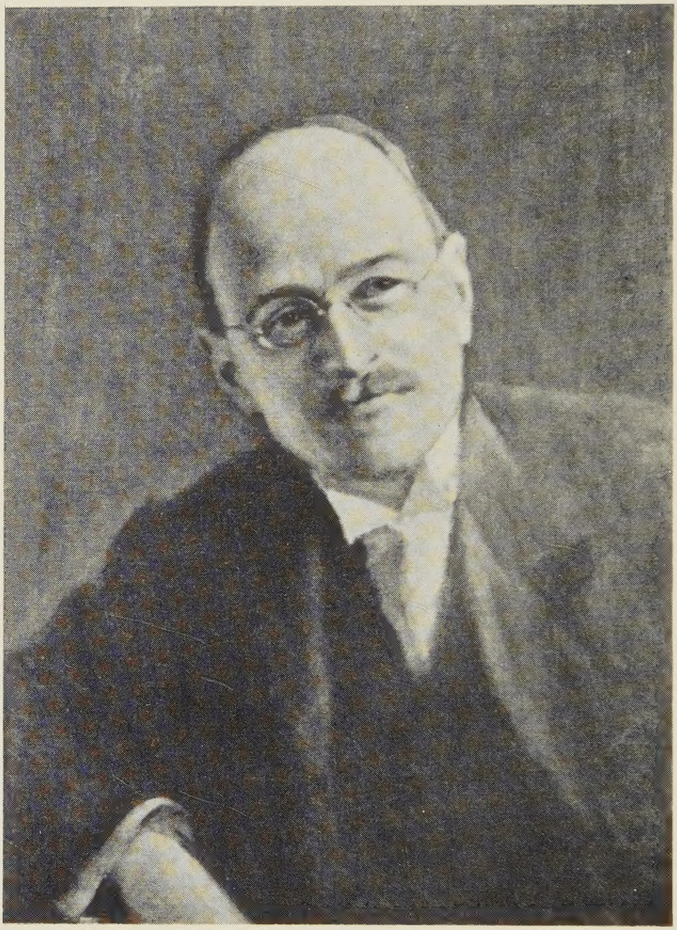

DR. GEORGE HEMPL
(From a painting by Anne Foster)

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Mediterranean Studies

I. The Genesis of European Alphabetic Writing

II. Minoan Seals

By

GEORGE HEMPL, 1859-1921
Late Professor of Germanic Philology
Stanford University

Edited by

FREDERICK ANDERSON
Associate Professor of Romanic Languages
Stanford University

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1967

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EDITOR'S PREFACE

Although the publication of this volume has been much delayed, I have made no effort to revise it in the light of theories and discoveries set forth by other scholars since the time it was written. I am not competent to do so, and not much would be gained. On the basis of his theory of the alphabet, Dr. Hempl declares that the language of the Hittites and Minoans was Greek, and that Etruscan and Venetic are Italic dialects. The really important question is whether this theory of the alphabet is correct, and whether the inferences drawn from it are correct. Even though every interpretation of ancient writing given in the book were wrong from beginning to end, Dr. Hempl's work would still merit careful study. The greatest weakness in his theories is, in my opinion, his failure to take account of the mixed character of Hittite and Etruscan and to allow for the large foreign element which both of those languages must have contained. I earnestly hope that whatever defects the book may have (and many of them are doubtless due to my own shortcomings) will not blind the learned world to the extraordinary possibilities opened up by Dr. Hempl's general method.

Publication of Numbers 1 and 3 of this volume is made possible by a generous grant from the Carnegie Institution of Washington.

FREDERICK ANDERSON

STANFORD UNIVERSITY, CALIFORNIA
September 1930

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TABLE OF CONTENTS

PAGE

PORTRAIT OF DR. HEMPL (from a painting by Mrs. Anna Foster) . . . *Frontispiece*

A MEMOIR OF THE LATE GEORGE HEMPL 9

A List of Dr. Hempl's Publications 19

SYSTEM OF ABBREVIATIONS 24

I. THE GENESIS OF EUROPEAN ALPHABETIC WRITING 25

Editor's Note 26

§§ 1–49; Synopsis Illustrating the Derivation of Alphabetic Forms, § 50; Supplementary Letters, §§ 51–62

II. MINOAN SEALS 69

Foreword 71

§§ 1–19; Specimen Interpretations, § 20; Index to the Pictograms, § 21

MEDITERRANEAN STUDIES

A MEMOIR OF THE LATE GEORGE HEMPL

Throughout his life George Hempl[1] was interested in speech-sounds and the means by which they are represented, and nearly everything he wrote deals with some phase of this interest, either extending its horizons or unfolding its implications. This essential unity which we retrospectively perceive was not, however, the realization of a great design, for although from his youth onward Dr. Hempl was bent upon achieving distinction, he lived very much in the present, and for himself, at least, every achievement was a somewhat isolated fact. It results, instead, from his having chosen as a subject for investigation one of those labyrinthine problems that lure the scholar's mind into ever fresh mazes and from which death alone can withdraw him.

His father, who had received a university education in Germany, was a linguist of considerable talent, possessing the traditional "seven languages." He took great care, however, that his children should master English before learning another tongue; so German was very rarely spoken in the family circle, and none of the children knew more than a few words of it before they went to high school. Perhaps this circumstance lent a certain piquancy to language study on the principle of *"omne ignotum pro magnifico."* Dr. Hempl's sister remembers being much put out by hearing her elders make cryptic remarks about *"jemand,"* which she knew must refer to herself. However this may be, Dr. Hempl followed the classical course at high school and at college, although his native talents lay rather in the direction of the physical and natural sciences. Soon after graduation from the university, however, he found in the study of phonetics a subject

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[1] 1859	Born at Whitewater, Wisconsin, June 6, son of Henry Theodore Hempel and Anna (Haentzsche) Hempel.
1879	A.B., University of Michigan.
1879–1882	Principal of the Saginaw, Michigan, High School.
1882–1884	Principal of the Laporte, Indiana, High School.
1884–1886	Instructor in German in the Johns Hopkins University.
1886–1889	Student at the Universities of Göttingen, Tübingen, Strassburg, Jena, and Berlin.
1889	Ph.D., University of Jena.
1890	Married Anna Belle Purmort.
1889–1893	Assistant Professor of English in the University of Michigan.
1893–1897	Junior Professor.
1897–1906	Professor of English Philology and General Linguistics.
1906–1921	Professor of Germanic Philology in Stanford University.
1921	Died August 14.

congenial alike to his gifts and his profession. Its importance for the proper understanding of the history of language was beginning to be understood, and the classical works of Ellis, Sweet, Scherer, and Sievers had all appeared during the preceding decade. Accordingly Dr. Hempl asked Ellis to furnish him with a methodical plan of work in the science (a request which, I believe, was very graciously received), and when he was at length enabled to study in Germany[2] he sought out the scholars most apt to give him thorough training in the new method and its application to phonological problems. He remembered with especial gratitude Professor Kluge and Professor Sievers.

It is in a volume of philological studies presented to Professor Sievers by former pupils (1896) that Dr. Hempl's first important work appeared, a brief article entitled *"Wimmer's Runenlehre."* Here, beside some very shrewd observations on the origin and value of the runic letters,[3] we find the two ideas which ultimately lead to his general theory of European alphabetic writing: (*a*) He rejects Wimmer's famous *"Runenmeister"*—a kind of *urgermanischer Kadmus,* supposed to have forged the runic letters from Latin materials—and he is obviously convinced that the rôle played by invention in the history of writing is almost negligible. (*b*) He insists that the affinities of runic writing are North Italic rather than Latin. This view is stated with great caution in his *German Orthography and Phonology,* published in the following year (1897): "It is now usual to adopt Wimmer's derivation of the runic futhark from the Latin alphabet. This, however, does not seem to be so certainly proved as has been supposed. Most of the runes may be as readily derived from other alphabets, and some of them, that cannot be derived from the Latin alphabet without considerable assumption and manipulation, find exact counterparts elsewhere, for example, ᛞ and the turned ᛚ ∧ in the Sabellic and Venetic alphabets. With the increase of our knowledge of early alphabets, it may yet turn out that the runes and certain North-Italic alphabets have a common origin, or that the runes are from an alphabet akin to the Sabellic and Venetic but modified by the influence of the Latin."[4]

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[2] He passed a year and a half at Berlin and Göttingen, a year at Jena and Dresden, and a year at Strassburg and Tübingen.

[3] Of these the most valuable is the suggestion that the runic symbol for *ng* was originally a ligature.

[4] This admirable little book established Dr. Hempl's reputation. It incidentally betrays the author's enthusiastic interest in the printer's art—an interest which dates from early youth. Part II ("Word-List and Index"), of which a few specimen pages are printed at the end of Part I, was never completed, a work of similar scope having appeared before Dr. Hempl had completed his manuscript—K. Duden, *Orthographisches Wörterbuch der deutschen Sprache,* first edition, Leipzig and Vienna, 1900; eighth edition, 1913.

One of the first traits which called for explanation in studying the Venetic letters was the presence of occasional dots or upright strokes placed at either side of certain characters, or single strokes following the character. On a bronze plate found at Este, inscribed with an alphabet (Pauli, *Alt-italische Forschungen,* I, page 48), practically all the characters are furnished with these strokes, and I imagine that it was this striking fact which first disclosed their meaning to Dr. Hempl. They are intended to show that the consonant sign represents a single sound instead of a syllable. In their absence the sign would be read as consonant plus the vowel *a;* that is to say, the letter *k* represents the sounds *ka,* while ·*K*· is used to represent the simple consonant sound *k*. These marks were likewise used (although not in all inscriptions and never very systematically) to show that a vowel was initial or formed part of a diphthong. This means that Venetic, like Sanskrit, is a transitional form of writing, being neither syllabic, like Cyprian, nor alphabetic, like Greek and Latin; and the marks in question correspond to the Sanskrit *virama* and *avagraha.*[5] All this was guessed by Thurneysen many years ago (*Wochenschrift für klassische Philologie,* 1892, page 286) and is mentioned in Lindsay's *Latin Language* (page 12; cf. Lindsay-Nohl, page 14), but by some strange mischance it escaped the attention of Pauli and his disciples, who contined to transcribe Venetic as though it were alphabetically written, and declared it to be an Illyrian dialect. Transcribed in this fashion and with several characters wrongly interpreted (*vide infra*), the language certainly does assume a very "Illyrian" appearance.

Ultimately Dr. Hempl reached the conclusion that both the runic and the North-Italic alphabets were derived from a common Western Greek script, and that the order of the runic letters was due partly to confusion of characters similar in form or value, partly to a difference in numerical values assigned to them in Germanic territory. These discoveries were incorporated in a little volume which was to have appeared in 1903, entitled "Greek and Runic Letters and Numbers."[6] This work was laid aside in order that the author might interpret the runic inscriptions in the light of his new-found knowledge, for he saw that many of them were semi-syllabic (or, as he terms it, *penalphabetic*), and make use of the virama just as Venetic does. One may readily imagine his exultation as he beheld these mystic writings, which hitherto had seemed meaningless gluts of consonants, transformed into good Germanic. For several years he devoted himself to sketching interpretations of the most stubborn runes, publishing little but accumulating material. Early in 1908 he discovered that certain runes from Austria and Central Germany were written in a dialect of which little or nothing had been previously known, Burgundian, and that dialect bridged the gap between Anglo-Frisian and Old Norse. He planned a monumental study of the runic inscriptions to be published by the Carnegie Institution, and his footnotes began to bristle with that pathetic phrase "in a forthcoming publication."

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[5] Cf. p. 14 of this *Memoir.*

[6] The manuscript was revised in 1907 and again in 1917. Unfortunately it still needs much patient tinkering, and with much regret I have consigned it to the dubious limbo of things "forthcoming."

Dr. Hempl had mistaken his own character: he was not a colonist, but an explorer. The great work on the runes was doomed to remain a mere collection of penciled notes; for soon after the publication of the Preliminary Report on the Burgundians he discovered that he could read Venetic. The chief obstacle hitherto had been a confusion between the letters *i* and *h*, comparable to the confusion between the English *y* and þ. The letter which Pauli transcribed as *h* was really *i* or *y*, and the letters which he transcribed as *i* and *u* were really variants of *h*. In Dr. Hempl's corrected transcription Venetic proved to be an Italic dialect closely related to Latin, in some respects more conservative than Latin. He presented his discovery before the American Philological Association, and wrote at least four versions of it, but never again found time to see it into print. Matters of far greater importance absorbed his attention. In December of this same year he succeeded in deciphering Etruscan. From this time to the end of his life his contributions to philological learning became ever more far-reaching and amazing, while his reputation as a philologist steadily waned.

None of his predecessors in the study of Etruscan possessed his knowledge of alphabetic forms or his phonetic intuition. "The name CHARUN," says Taylor,[7] "may be explained from Ugric sources. The suffix *-un* occurs repeatedly in the names of Etruscan deities, and is probably an abraded form of *aina*, a 'spirit,' or of *jum*, 'god.' The first syllable of the name may be either Turkic *kara*, 'black,' or it may be from a root which denotes an 'oar,' or a 'river'." Corssen turned the words for 'one two three four five six,' inscribed on the faces of some Etruscan dice, into the following: Etruscan, *Mach thuzal huth cisa* = *"Magus donarium hoc cisorio fecit."*[8] When Corssen's work first appeared the correctness of its main contentions was almost universally conceded by the learned world. By a somewhat ironic chance, Taylor was the only scholar who protested against the unsoundness of his method.[9] A year later, Deecke, in a pamphlet forty pages long,[10] proved that Corssen's Goliath volumes (they contain more than

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[7] *Etruscan Researches*, pp. 117 ff.

[8] Corssen, *Die Sprache der Etrusker*, I, 806.

[9] Deecke, *Corssen und die Sprache der Etrusker*, p. 3.

[10] Deecke, *op. cit.*

1,700 pages!) were composed for the most part of *"Spiele der Phantasie."* But Deecke himself later passed over into the ranks of the Philistines and maintained the Italic character of Etruscan until he was frightened back into orthodoxy by Pauli. The latter assumed that, whatever Etruscan may be, it certainly is not Indo-European, and that it must therefore be deciphered by what is called "the combinatory method," that is, by comparing inscriptions with each other and guessing one word at a time. This method has certain obvious advantages. Since it does not involve comparison with any other known language, it does not require a profound knowledge of phonetics and does not demand any systematic account of correspondences. There is no way to control conjectures until all the inscriptions are deciphered, and they are never all deciphered. This, I believe, is the reason why the (mainly negative) conclusions of Pauli and his followers are cited as authoritative, although no unknown tongue was ever deciphered in this way and Pauli's school have accomplished nothing during half a century. Again, none of Dr. Hempl's predecessors had the good fortune to begin their researches, as he did, with the study of the most archaic Etruscan text we possess—the Lemnos Stone—which contains three very obvious Italic words (*naφoϑs* = *nepos; maras* = Umbrian *maro,* Oscan *maras,* Latin *Maro; aker* = *acer*). Clearly he had a right to succeed.

The sequel is tragic. For three years after announcing his discovery, he published nothing; then, instead of issuing the stout volume in which he had already outlined the principles of Etruscan phonology and morphology, he published a meager fragment (1911). This was obviously a mistake, since the value of such work depends very largely upon its completeness and coherence; and there was good reason to expect that Dr. Hempl's interpretations would be eyed askance. Still, the tone assumed by the reviewers seems to me utterly unjustified. None of them spoke with that dispassionate serenity which one expects from students of classical antiquity; many of them ascribed to Dr. Hempl idiotic statements which are flatly contradicted by the text itself. But if they offered no sound criticism, they at all events were instrumental in surrounding Dr. Hempl and all his works with a vague aura of disfavor. Scholars who had not read his little pamphlet with any great degree of diligence, or perhaps had not read it at all, spoke of the author as "ingenious but unsound," and after Danielsson[11] showed that two of the inscriptions interpreted by Dr. Hempl had been tampered with, no further interpretations having appeared from Hempl, *les esprits forts* even went so far as to question his sanity.

Anyone who knew him ought to have guessed the reason for his continued silence: he was busy with new discoveries. About a year and a half after beginning his Etruscan studies he saw a copy of Evans's *Scripta Minoa* in the hands of his colleague, Professor Fairclough; begged to examine it; took it away to his home; and after two evenings' work succeeded in divining the principle of the Minoan script. By good fortune he did not begin with the study of the Minoan inscriptions, but turned his attention to a long inscription on a clay plaque known as the Phaestos Disk, written in a script quite distinct from the Minoan and yet clearly somewhat similar in nature. And here he discerned a very familiar trait. "On first examining the Disk I was struck by an oblique scratch under some of the characters. This reminded me of the virama of Sanskrit, Venetic, and early Runic writing, being in form and position identical with that found in Sanskrit. . . . . I found forty-five different characters in all—too many for alphabetic writing and not enough for hieroglyphic writing but just about the right number for syllabic writing."[12] These two observations furnished a means of attacking the problem. The eight characters which occur with the virama must be consonant signs, which in the absence of the virama imply a following vowel, possibly *a*. Five of the forty-five characters represent vowels, and the remaining forty probably represent syllables made up by combining the five vowels with the eight consonant types. These are surely reasonable expectations, but they do not reveal the values of the individual signs, and Dr. Hempl was soon obliged to give up this a priori reasoning for the less satisfactory method of guessing a few words and trying on the rest the sound-values thus obtained.[13] Then, after making

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[11] Danielsson, "Zu den etruskischen Inschriften Piranesi's," *Särtryck ur Minnesskrift till Professor Axel Erdmann,* Uppsala, 1913.

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[12] "The Solving of an Ancient Riddle," *Harper's Magazine*, January, 1911. By hieroglyphic he means ideographic writing.

[13] The a priori method might have been carried one step farther. In the Cyprian script twelve consonant types are distinguished: labial stops, dental stops, palatal stops (in each case using a single sign for *p, b, ph,* etc.), *y, w, r, l, m, n, s, z, x*. By using the vowels *i* and *u* for the consonant values *y* and *w*, and substituting the combinations *te-se ke-se* for *z* and *x* the number of consonant types may be reduced to eight, which seems to be the minimum attainable. We might therefore expect the Phaestos syllabary to contain the consonant types *p, t, k, r, l, m, n, s*. Assuming the language of the Disk to be Indo-European, we might likewise expect *s* to be the commonest final consonant. (In Greek the number of words in final *-n* slightly exceeds the number in *-s* owing to the change of *-m* to *-n*. In a very archaic text final *-m* might, however, appear even in Greek.) Now the number of final consonants as revealed by the use of the virama is singularly low, so that if the language is indeed Indo-European, it probably is one in which vocalic (pronominal) endings have been substituted for the original nominative plurals of *a*-stems and *o*-stems, and we may look for words which end in two vocalic characters.

Such calculations, however slight their absolute value, seem to me the surest available means of controlling speculative results. In Dr. Hempl's complete manuscript version of the Disk, final *-n* occurs once and is supplied once, while final *-m* some progress in this fashion, he learned a fact of the greatest consequence: that the phonetic value of each pictogram corresponds to the first syllable of its name. The tunny-fish (ϑύννος) spells *tu,* the ship (νηῦς) spells *ne,* the bow (τόξον) spells *to,* etc. Now it is quite probable that in deciphering the Disk he interpreted many of the characters incorrectly and that his Greek version is accordingly erroneous. But this fact (if it is a fact) has relatively little importance; what is of real importance for us is that we have here a general principle of great intrinsic plausibility explaining the development of phonetic writing from ideographic. Granting that in all his investigations Dr. Hempl's success was only partial, this theory of the evolution of writing will eventually permit other scholars to correct and to complete what he effected, and without his theory the progress of philology in these fields would probably be as discouragingly slow as it has been in Etruscology.

Although his reviewers and critics failed to grasp the implications of this discovery, Dr. Hempl was not slow in pursuing them. He saw that the Minoan pictographs and derived linear forms could be deciphered in the light of this new knowledge and set about the task with alacrity. Since the Minoan symbols far outnumbered the characters on the Disk, it was clear that Minoan writing was not a restricted syllabic system, but instead was acrophonic: the picture was intended to suggest sometimes one syllable of the name of the object depicted, sometimes two syllables, sometimes the entire word; putting together the sounds thus conveyed, the reader found a rude phonetic picture of the words which the writer sought to record. In working on this script Dr. Hempl found a way to control his results which had been altogether lacking in the case of the Phaestos Disk. Not only was he able to decipher the inscriptions by assuming that the language was Greek and by assigning to the pictograms the values got from their Greek names, but he likewise discovered that our familiar alphabetic forms are ultimately derived from the pictograms (as Sir Arthur Evans had previously shown) and that the phonetic values of our letters correspond to the values of the pictograms. In Minoan the plow (ἄϱοτϱον) spelled *a* and evolved into our letter *A,* which still resembles a plow set up on end; the double axe (πέλεϰυς) spelled *pe* and was differentiated into the letters *B* and *P* of later scripts, and so on (cf. A, § 50, infra). Such correspondence could not be attributed to chance and they furnished a conclusive proof

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does not occur at all. Having failed to find ten lines of any Greek text or inscription in which the number of final nasal consonants is so low (the average is over one per line) I feel skeptical of Dr. Hempl's identifications. At the same time it should be observed that the value of his later work depends only upon the accuracy of his original assumptions and not at all upon the accuracy of his Greek version. His work on the Disk is important only because it suggested a theory of early Mediterranean scripts.

that the names of the pictograms were Greek and the language of the inscriptions Greek.

Having deciphered the pictographic texts from seals and clay tags which appear in Volume I of *Scripta Minoa,* Dr. Hempl was uncertain whether to publish his interpretations or to await the publication of Volume II, which was to contain inscriptions in the linear scripts and the so-called "clay documents."[14] A study of these linear texts would probably be of great assistance in correcting and clarifying what he had already done, and the texts themselves would almost certainly prove to be of far greater archaeological importance than the pictographic. Moreover, he was still striving to complete at least a small volume on Etruscan, and he was perpetually lured by investigations into the history of alphabetic writing.[15]

Characteristically he escaped this *embarras de richesses* by setting forth upon a new enterprise. He had explained how pictograms, which at first represented ideas, had come to represent names and parts of names, until a purely phonetic system of writing was evolved. The process seemed so natural and so inevitable that one could not help believing it to be of universal scope, nor was it fantastic for one to suppose that other ancient writings, hitherto undeciphered, might now be successfully interpreted. Since the study of Etruscan and Minoan had acquainted him with the principal theories and problems of early Mediterranean history, he could not forbear testing this supposition on the Hittite texts, where so many interesting facts lay hidden.

At first approach the task seemed an easy one, for we possess Hittite texts written in the cuneiform characters beside those written in the Hittite pictographic script, and it was to be expected that whatever was accomplished in one set might be verified by data obtained from a study of the other. Dr. Hempl began work on the pictograms late in 1912 and very soon discovered that they too were Greek, many of the inscriptions being written in a dialect closely resembling the familiar Doric. He then turned to the cuneiform texts whose phonetic value had been previously determined within rather loose limits of accuracy, and, finding the evidence much more palpable here, published a transcription and translation of the letter of Amenophis III (1913). It must be acknowledged that the advantage of having two kinds of script to work on is more than offset by the intolerable looseness with which sounds are conveyed in both. "In our text," wrote Dr. Hempl, "I find that the sibilant letters *s, š, ṣ, z,* are used interchangeably, and that cognate consonants like *c, g, ch, q,* are not differentiated, that is, any one of the characters (*k, g, ḫ, q*) may be used to spell any one of the sounds. Even in good Assyrian texts the letter *ḫ* was used to spell Greek *χ, q, κ*. Assyrian had no *o*, and so no letter for it. When cuneiform characters were used to write foreign languages, the foreign *o* (for example Greek ω, ο, ου) was written either *a* or *u*. This indifferent use of *a* and *u* led to the occasional employment of *u* to spell *a*."[16] Such uncertainties obviously leave only too much scope for ingenious manipulation, and Dr. Hempl could hardly expect so brief a fragment to command immediate assent. In 1914, however, Delitsch published fragments of a glossary[17] containing Hittite translations of Sumerian and Assyrian words, and the situation was entirely changed. Something very much like a demonstration was now possible, and Dr. Hempl's discussion of this material,[18] though brief, ought to have convinced any scholar whose notions of phonological probability had not been unduly narrowed.

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[14] Sir Arthur Evans wrote (*The Palace of Minos,* 1921) that these materials are "in an advanced stage of preparation."

[15] Cf. "Early Cyprian Greek," published in 1915 in *Transactions and Proceedings of the American Philological Association.*

Work on the pictographic texts meanwhile proved arduous and teasing: the number of the pictograms is very large, they are not always readily distinguished from ornaments and cult-symbols, many of them resemble no object which the modern eye may recognize, many of them have degenerated into hieratic forms, and they seem to have been applied to the representation of sounds even more laxly and clumsily than the cuneiform characters. So progress in this field was distressingly slow. In 1915 Dr. Hempl issued an interpretation of the bilingual inscription on the seal of King Tarcondemus, together with fragmentary readings from other inscriptions; but he did not yet possess enough materials for a systematic account of the syllabary, in which particulars should be corroborated by parallel instances, nor did he ever have time to interpret the longer inscriptions and to compose such an account. All too soon he realized that a complete and tolerably accurate treatise on pictographic Hittite could be achieved only after years of untroubled labor.

For such years he could no longer hope. Early in 1914 he was stricken by a severe illness which compelled him to relinquish all work for many months and to beguile his enforced idleness by a journey to the Eastern states. When his health had somewhat mended, he felt constrained to undertake the task of revising and completing his books on Venetic, Etrus-

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[16] Delitsch, in the work cited in note below, calls attention (p. 32) to cases of alternative spelling which prove that *e* and *i*, *g* and *k* were not distinguished in the Trilingual Glossary.

[17] "Sumerisch-Akkadisch-Hettitische Vokabulärfragmente," *Einzelausgabe*, Berlin, 1914.

[18] "Hittite Greek," *The Nation*, New York, September 9, 1915. A revised version of this article is printed as *Mediterranean Studies: III B*, in Number 2 of this volume.

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can, and Minoan; for the cold reception of his latest productions[19] showed very plainly he must re-establish his reputation before any work of his would be seriously considered. He was much comforted by the abiding confidence of his family and his friends; the University and the Carnegie Institution were unfailing in their generosity; he could rely upon the future to do justice to his work. Yet these consolations, whatever their power to sustain his courage, could not alleviate his perpetual weariness. For a little while he seemed to be recovering and was able to accomplish an astonishing amount of labor. Then came a series of almost yearly prostrations. Often he could work but one hour a day, and he was never again vouchsafed the long period of vigor which one needs for the ordering of intricate materials. He still made headway, but it was the cruel progress of a spent swimmer.

Again and again he revised his manuscripts, correcting, re-arranging, clarifying. There are no less than seven versions of the book on Etruscan, four on the Minoan Seals, four on Venetic, and three on Hittite. Each version merely corrects details of previous ones and presents a new combination of materials. There are, further, revisions of all the papers published after 1912, in which his earlier views are ruthlessly criticized. Conscious that his eyesight was rapidly failing, he shrank from the exacting labor of seeing his work through the press, and hoped that he might still find time and health to complete a full account of his theory of the alphabet and a treatise on the languages of Asia Minor.[20] But time and hope were all too quickly spent. Early in 1920 he decided that at least a part of his materials should be published at once, and planned to issue four studies under the title "Hittites and Minoans"[21] to be followed by a short volume on Venetic and Etruscan. Although twice interrupted by severe illness, he had the manuscript of the first book practically finished in the following year, and he worked on it the day of his death.

[19] Aside from the brief notice by Professor Giles (*The Year's Work in Classical Studies,* 1915, p. 36) Dr. Hempl's contributions to the decipherment of Hittite were ignored. The late Professor Jastrow, in explaining why he could not mention them in his review of Oriental studies, condescendingly called attention to the *Trilingual Glossary.* Since one of the papers which Dr. Hempl had sent him dealt with this very text, it is clear that Professor Jastrow had not read it. This, of course, lifts Dr. Hempl's critic to no "bad eminence." Apparently no one read that paper. Professor Buck (*Classical Philology,* XV, 185, note) accuses Dr. Hempl of not knowing that *Kuiš* is a pronoun, because in the article on the letter of Tarcondorus it happens to represent a very different word (in *one* place). Had he read the article in *The Nation* he could not have made this remark.

[20] See the first paper in the present volume. The notes on Lydian, Lycian, and Phrygian (with some interpretations of Siculian) are unfortunately mere sketches.

[21] These appear as *Mediterranean Studies; II, III,* in the present volume, although not in the form in which he left them.

A LIST OF DR. HEMPL'S PUBLICATIONS

"Why the Best Pupils Take the Classics," *The Nation,* October 11, 1883.

"Latin and Greek Words in English," *The American* (Valparaiso, Indiana), April, 1884.

Review of Boisen-Bernhardt's *German Grammar and Reader, Modern Language Notes,* I, 3; 1886.

Review of Van der Smissen's *Kinder und Hausmärchen der Gebrüder Grimm, Modern Language Notes,* I, 27; 1886.

Review of Knoflach's *German Simplified, Modern Language Notes,* I, 125; 1886.

Whist Scores and Card-Table Talk, with a Bibliography of Whist, by Rudolf H. Reinhardt. Chicago, 1887.

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SYSTEM OF ABBREVIATIONS

The titles of books and journals are frequently abbreviated by using the initial letters of the most important words in the title, thus: *SM., Scripta Minoa; AJSL., American Journal of Semitic Languages and Literatures; TAPA., Transactions and Proceedings of the American Philological Association,* etc.

An asterisk (*) prefixed to a word indicates that it is an inferred (theoretical) form.

The studies contained in the present volume are referred to as follows:

A. "The Genesis of European Alphabetic Writing."

CH. "Cuneiform Hittite."

E. "Etruscan."

EI. "Etruscan Inscriptions" (being Part III of "Etruscan").

H.1 "The Prehistoric Wanderings of the Hittite Greeks."

H.2 "Hittite Doric, with Special Reference to the Trilingual Glossary."

LS. "The Lemnos Stone" (Part II of "Etruscan").

M. "Minoan Seals."

V. and *VI*. "Venetic" and "Venetic Inscriptions."

Previously published studies by Dr. Hempl are referred to as follows:

ECG. "Early Cyprian Greek," *TAPA.,* XLVI, 229–48; 1915.

OD. "The Old Doric of the Tell el Amarna Texts," *TAPA.,* XLIV, 185–214; 1913.

PhD. "The Solving of an Ancient Riddle, the Phaestos Disk," *Harper's Magazine,* January, 1911.

TB. "The Hittite Text on the Tarcondemus Boss," *Flügel Memorial Volume,* Stanford University, 1915.

I. THE GENESIS OF EUROPEAN ALPHABETIC WRITING

EDITOR'S NOTE

The basis of the following study is the paper, referred to in the first paragraph, which was presented before the American Archaeological Institute in December, 1914. To this I have added material taken (1) from a much shorter manuscript written three or four years later and entitled "The Alphabet"; (2) from the manuscript on "Minoan Seals"; (3) from a published study called "Early Cyprian Greek"; and (4) from various short notes which I found among Dr. Hempl's papers.

F. A.

THE GENESIS OF EUROPEAN ALPHABETIC WRITING[1]

1. The chief purpose of this essay is a practical one. My runic studies and, still more, my recent Mediterranean studies are so interlocked with the subject of the origin and development of European writing that I am constantly under the necessity of explaining the position I hold as to the latter. In order to avoid repetition and to facilitate reference, I desire to present here a brief statement of my conception of the various stages and processes whereby European pictographic writing gradually developed into Greek alphabetic writing. The paper is in all essentials the same as the one I presented at the meeting of the American Archaeological Institute at Philadelphia, December, 1914. I make no pretense of furnishing in these few pages a study of a subject that has many phases and is complicated by countless details. What I aim at is a comprehensive statement of the conclusions I have arrived at as to the matter, with sufficient illustration to make clear the reasonableness of it all. This study thus forms, at it were, a sort of foundation upon which my various other alphabetic studies may rest, studies which in turn will furnish fuller corroboration of its theses.

2. Except in the case of certain very recent suggestions, I shall not undertake to discuss the various theories hitherto put forth as to the origin of the alphabet. The most extended study of the subject is Taylor's *The Alphabet,* which was an excellent book in its day but is now quite antiquated. For a general but brief treatment of the subject and its most important literature, see Giles's excellent article on the Alphabet in the *Encyclopaedia Britannica.* For a judicious summary of the claims of the various theories, see Peter's paper in the *Journal of the American Oriental Society* (1901), XXII, 177; also Evans's *Scripta Minoa,* pages 82 ff. For the bibliography of the subject, see Larfield, *Griechische Epigraphik,* third edition, 1914, in Müller's *Handbuch,* Vol. I, Part 5, pages 203 ff.

3. The story of the origin and development of writing has interest not only for philologists, but also for many whose interests are less specialized, and the peculiar fascination of the subject has led minds of the most varied types to essay the solution of the great problem. Until recently almost universal credence was accorded the theory propounded in 1859 by Vicomte Emmanuel de Rougé.[2] According to this view the Phoenician alphabet was developed from Egyptian hieratic script, which is a cursive derivative of Egyptian hieroglyphic writing. Giles fairly summed up the claims of this theory in the words: "The resemblances between some Egyptian symbols and some symbols of the Phoenician alphabet are striking; in other cases the differences are no less remarkable."

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[1] The following works were consulted (see the "System of Abbreviations," page 24): Buck, *Introduction to the Study of Greek Dialects* (Boston, 1910); Roberts, *An Introduction to Greek Epigraphy,* Part I (Cambridge, 1887); H. Roehl, *Inscriptiones Graecae Antiquissimae praeter atticas in Attica repertas* (Berlin, 1882), frequently referred to as *IGA.; Journal of Hellenic Studies,* abbreviated as *JHS.;* Larfield, *Griechische Epigraphik* (third edition, 1914); Littmann, Sardis: *Publications of the American Society for the Excavation of Sardis,* Part I (Leyden, 1916, 85 pages 4to); Evans, *Scripta Minoa,* Vol. I (Oxford, 1909), referred to as *SM.;* Taylor, *The Alphabet* (2 vols., New York, 1899).

4. That the Phoenician alphabet formed the basis of the Greek is also a matter of almost universal belief. There is an ancient tradition to this effect and there are various features of the two alphabets that give color to the theory. But already in ancient times it was disputed. To quote Evans:[3]

> Diodorous . . . . tells us that by the Theran stream, in the neighborhood of Knossus, the country people—largely no doubt representing under a Hellenized guise[4] the old indigenous race—came together every year to celebrate the nuptials of the Cretan Zeus and his consort. Sacrifices were made, and the actual marriage ceremony was rehearsed through some kind of religious play "in the manner that had been handed down from ancient times." Diodorous next proceeds to summarize what seems to have been the gist of the religious doctrines conveyed by this commemorative ritual. The Cretan Zeus is here made to work out a comprehensive scheme for the physical, industrial, and intellectual culture of mankind by the agency of his various children. Amongst these, continues our informant, "the Father assigned to the Muses the invention of letters and poetry. And the Cretans have an answer to those who attribute the invention of letters to the Syrians, and who say that the Phoenicians learnt them from these and passed them on to the Greeks, this being done through Cadmus and those with him sailing to Europe, so that the Greeks call the letters Phoenician. To this they reply that the Phoenicians were not the original discoverers of letters, but that they simply changed their shapes. Owing, however, to the fact that the generality of mankind use these letters, they acquired the name Phoenician." Diodorous V. c. 74.

5. In recent years, doubts have been thrown upon the theory of the Egyptian origin of the Phoenician alphabet, and also upon the theory of the Phoenician origin of the Greek alphabet. The discovery of the Tell el Amarna tablets, which disclosed the general use of cuneiform writing in

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[2] De Rougé communicated his theory to the Académie des Inscriptions and it was reported in the *Comptes Rendus* but was not generally known until it was published, after his death, by his son in a *Mémoire sur l'origine égyptienne de l'alphabet phénicien.*

[3] *SM.*, p. 106.

[4] Evans is unwilling to believe that the Minoans were Greeks, and therefore finds it necessary to assume Hellenization in cases of this kind.

Syria in very early times, led Hommel, Delitsch, and Grimme to return to a theory early advanced by Deecke, namely, that the Phoenician characters arose out of the cuneiform or their prototypes. On the other hand, Edward Meyer advanced the probability of their development from the Hittite pictographic characters. While none of these attempts to find the origin of the alphabet resulted in establishing the theories advanced, or even in making them appear at all likely, they thoroughly undermined the theory of Egyptian origin.

6. That there existed, however, some relation between cuneiform writing and the Greco-Phoenician alphabet was shown by Peiser's establishment of the fact that the 400 cuneiform signs had a conventional order,[5] and by Zimmern's subsequent observations[6] that there is a peculiar correspondence between this and the order of some of the letters of the alphabet. This, Zimmern urged, could not be accidental and would therefore seem to imply that, whatever the source of the Phoenician characters, the order in which they stand was based upon that of the cuneiform characters. Zimmern took these Semitic names for the letters that coincide with Semitic words; he then sought out the cuneiform ideographs for these words and noted their respective numbers in the shorter list of about two hundred ideographs, with the following result:

CUNEIFORM			ALPHABET	
1	*mū* 'water'	=	13	*mēm*
17	*nūnu* 'fish'	=	14	*nūn*
42	*ēnu* 'eye'	=	16	*'ayin*
51	*pū* 'mouth'	=	17	*pē*
52	*rēšu* 'head'	=	20	*rēš*
105	*alpu* 'ox'	=	1	*ālef*
140	*idu* 'side'	=	10	*yōd*
147	*bītu* 'house'	=	2	*bēt*
155	*daltu*	=	4	*dālet*

7. In other words, the cuneiform characters 1-17-42-51-52 occur in the same order as the Phoenician 13-14-16-17-20, and the cuneiform characters 105-140-147-155 have almost exactly the same order as the Phoenician 1-2-4-10. There are really only two discrepancies: Assyrian (51) 'mouth' and (52) 'head' are adjacent, while Phoenician (17) 'mouth' and (20) 'head' are separated by two other characters; secondly, the Assyrian ideograph for *idu* precedes *bītu* and *daltu,* while the corresponding Phoenician *yōd* follows *bēt* and *dālet*. Displacements of this type are, of course, not uncommon in the history of alphabets, and must be countenanced as not improbable, whether we suppose them to have taken place in the Assyrian or the Phoenician order. It will be observed that *m* begins the Assyrian list and the second half of the Phoenician; while *a* begins the Phoenician list and stands in the middle of the Assyrian. This can readily be explained by the metathesis of the two columns into which the alphabet is usually divided, both now and in ancient times. Or as Zimmern suggests, the inconsistency may be due to the writing of the first half of the cuneiform characters on one side of a tablet and the second half on the other, so that the learner might begin with either. In the face of the remarkable agreement between the order of the characters in the two systems it was fruitless to refuse to recognize a relation between them.[7]

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[5] Peiser, *Zeitschrift für Assyriologie,* I, 95 ff; II, 316 ff.

[6] Zimmern, *Zeitschrift der deutschen morgenländischen Gesellschaft* (1896), I, 667 ff.

8. In 1895 Evans suggested that Minoan pictographic writing might have contributed toward the invention of the Phoenician alphabet, and in later works[8] brought forward many serious arguments in favor of the theory that the Phoenician script as well as Cyprian syllabic writing were derived from Minoan linear writing;[9] and Lidzbarski[10] inclined to agree with him. In 1905 Dussaud[11] took the very radical ground that the Phoenician alphabet was based on the Greek, and that this had developed out of Minoan writing, a theory that Puchstein[12] considered worthy of attention and that I too have entertained.[13] The following year Praetorius[14] argued that the Phoenician alphabet was derived from the Cyprian syllabic script.

In an article written in 1909[15] he came to the conclusion that the Phoenician alphabet and the South Semitic alphabets arose by a very early bifurcation of a much older script now unknown to us, a script essentially alphabetic in character, but still plastic and not yet reduced to uniformity.

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[7] Evans (*SM.*, p. 63), after recognizing Peiser's proof of the order of the Assyrian characters, refers to Zimmern's association in the following words: "But it is only by a process of shuffling and cutting, as with a pack of cards, that any kind of agreement can be made out between the order of these and that of even a fraction of the Phoenician alphabet."

[8] See *SM.*, p. 80 and note 3.

[9] *SM.*, pp. 77 ff. and 68 ff.

[10] Lidzbarski, *Ephemeris für semitische Epigraphik*, Vol. II, No. 3, p. 372.

[11] Dussaud, "L'Origine égéenne des alphabets sémitiques," *Journal Asiatique* (1905), I, 357, etc. See also his *Les Arabes en Syrie avant l'Islam* (Paris, 1907), pp. 57–90.

[12] Puchstein, *Jahrbuch der Kaiserlichen deutschen archeologischen Instituts* (1907), p. 296.

[13] Hempl, "Early Cyprian Greek," *TAPA.* (1915), XLVI, 233.

[14] Praetorius, *Über den Ursprung des Kanaanäischen Alphabets*, Berlin, 1906.

[15] Praetorius, *Zeitschrift für Deutschen morgenländischen Gesellschaft* (1909), LXIII, 191. Also Gardiner, p. 4, see § 10, *infra.*

9. In 1912 Flinders Petrie published an exposition of his theory[16] that the alphabet arose out of "a wide body of signs . . . . gradually brought into use in primitive times for various purposes," which were "simple enough to defy corruption, and were ready to crystallize into a general system so soon as the selective influence began to work."[17]

10. Quite recently, Allan H. Gardiner has published a paper[18] which he says "practically advocates a return to Lenormant's view."[19] He bases his theory upon his interpretation of a group of letters occurring on several of the ancient stones recently found at or near Serâbît el Khâdim in the district of Sinai, whose script he regards as primitive Semitic.[20]

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[16] First advanced by him in his *Royal Tombs of the First Dynasty,* I, 31–32; see also *SM.,* p. 85, n. 8.

[17] Petrie, *The Formation of the Alphabet* (London, 1912), pp. 2, 6. How Petrie conceives of the development of the alphabet may be seen from the following: "In the early prehistoric graves in Egypt there are often found in a single burial several jars bearing the same mark, evidently that of the owner. A primitive use of signs is that by Sudani women for signing their hand-made pottery before it goes into the kiln, so that they may claim it after baking. At the present day among the illiterate *fellaheen,* of whom not one in twenty can read, the women will cut marks on their water jars to distinguish their respective properties. . . . . Such marks—however meaningless to us—have doubtless some sense in the user's mind, and hence some kind of names: such a name is perhaps at first but dimly present, but by habit the mark and its name would become gradually associated. Thus a series of apparently arbitrary signs would arise, with names attached to them. The next stage would be using the marks to denote the word, regardless of its meaning as a property sign. . . . . After that came another great wrench of thought, when the sign came to be attached to the sound, and not to the sense of its original form; and when it could be used for a word or a part of a word. . . . . It must have needed an active intercourse to drive men through this stage, and much resolution to overcome the confusion inherent in beginning to break from the sense of the sign. . . . . The next stage is when signs became purely syllabic as in the later Babylonian and Cypriote syllabaries. . . . . The final analysis into bare elements of sound, and only attaching an irreducible minimum of sound to each sign, has been reached in the alphabets" (pp. 4–5). Petrie makes no attempt to assign phonetic values of any kind to his potter's marks and other early characters previous to the time of Roman Egypt, but he unhesitatingly associates them with similar Greek letters. Thus his theory is based wholly upon graphic similarity and takes no account of the well-known fact that like or similar signs may and often do arise out of two or more very different originals. Petrie also appears to believe that the only alternative to his theory is the theory of Phoenician origin, and therefore assumes that whatever cannot be explained by that theory furnishes confirmation of his.

[18] Gardiner, "The Egyptian Origin of the Semitic Alphabet," *Journal of Egyptian Archaeology* (January, 1916), III, i, etc.

[19] As expressed by his pupil De Rougé in the volume published by his son; *vide supra.*

11. A really promising theory as to the origin of the alphabet first appeared when, at the opening of the present century, Sir Arthur Evans discovered the picture-writing of prehistoric Crete, and suggested that this writing might be the source of the Greco-Phoenician alphabet.[21] Evans did not question (as does Dussaud) the theory that the Greeks got the alphabet from the Phoenicians, but he argued that the Phoenicians got the script, not from the Egyptians, but from Minoan settlers on the Syrian littoral, formulated it into an alphabet, and passed it on to the Greeks. The primitive civilization of Crete that Evans brought to light he named Minoan, in honor of King Minos, and I shall employ this term when referring to the writing used in prehistoric Crete and kindred communities. In the first volume of his *Scripta Minoa* Evans presented, in considerable detail, the arguments in favor of his theory; but he failed to prove it, chiefly for the reason that he could not read the Minoan writing, and so did not know the values of the signs. His associations of them with the letters of the Greek alphabet were, therefore, (like those of Petrie) based wholly upon graphic similarity, and I cannot find that he was successful in even a single case.

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[20] Dr. Gardiner reasons with caution, moderation, and consideration quite unusual in studies of this kind, and it is with regret that one finds himself unable to agree with him in his final conclusions. That the new Sinaitic script is related to the Greco-Semitic and the Minoan is more than likely, also that it has points of similarity to Egyptian, as the Minoan has. But I am quite unconvinced that the group of letters that Gardiner reads Ba’alat/βαάλτις spells any Semitic word, or that the writing is Semitic. In fact I have reason to believe that the new Sinaitic is Minoan and the language Greek. The ✚ that Gardiner assumes to be *t* is the Minoan punct, as will be seen on a careful study of the Sinaitic texts. Gardiner evidently failed to observe that the group following the first ✚ on No. 348 is the same as the isolated group on the right side of No. 345. The spelling on No. 345 is redundant in inserting the ox-head, exactly as is the group on "P.23" in inserting the ratchet-wheel, as compared with the shorter spelling on P.24, *SM.*, p. 153 (see *M.*, 15). The shorter spelling on No. 348 is found also on No. 353. On both No. 348 and No. 353 the preceding word ends in a wavy line, but on No. 353 there is no punct separating the groups. The same spelling is found on No. 354, preceded by the ✚, but the preceding word is obliterated. On No. 346 the group begins with a crook preceded by the punct and the word that ends in a wavy line. The same spelling is found on No. 345, but here no punct is employed to separate the group from what preceded. Evidently the punct was often omitted if the scribe thought that the division would be clear without it, exactly as in Minoan. On No. 352 it is clear that a punct was crowded in after the text was written. The interesting use of a preceding and a following punct when a word consists of but one letter is observable on No. 347. This practice is characteristic of Hittite pictographic writings.

[21] *SM.*, pp. 77–94.

In 1910 I had the good fortune to succeed in deciphering the Minoan script, and found the language to be Greek. This gave me a material advantage over Evans. Furthermore I found that he was in error in assuming that Minoan writing was ideographic, for it is clearly acrophonic.

12. Writing may be classified

(1) according to the character of the symbols employed, into
  Pictographic writing, and
  Linear writing;

(2) according to the way in which these characters are used, into
  Ideographic writing,
  Acrophonic writing (= "Iconomatic"),
  Syllabic writing,
  Penalphabetic writing, and
  Alphabetic writing.

The last four are all phonetic. Pictographic writing may be used in any of the four different ways, though it is most likely to be ideographic, while linear writing is usually syllabic or alphabetic.

13. Unless a foreign method of writing supplants the native, there is no sudden transition from one system to another. Each system contains within itself the seeds of the following system. As these seeds grow and come to dominate the situation, what is not in harmony with them is gradually crowded out; and thus a new system comes into being. In this growth and dominance of what at first was only a favorable secondary feature, European writing was peculiarly happy and, by virtue of it, attained its full development in alphabetic writing.

14. The earliest writing, the world over, was pictographic and ideographic, and its use was doubtless at one time general throughout Europe and the adjacent regions. This ideographic writing was neither uniform nor fixed; but in the course of time one form became conventional in one center and a variant form in another. Many such systems have doubtless perished because of the fragility of the material upon which they were recorded; but a few lived long enough to develop into higher forms of writing and find permanence in rock, clay, or metal, for example, the systems reflected in Hittite, Minoan, and Philistine.[22] The earliest preserved records of all these show pictographic writing already advancing from the ideographic to the acrophonic stage.

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[22] As reflected in the text on the Phaestos Disk, *SM.*, pp. 273 f.; see also *Harper's Magazine* for January, 1911.

15. It is a common error to confound the terms "pictographic"[23] and "ideographic" and to assume that pictographic writing is ideographic, whereas it may as well be acrophonic. We must therefore get a clear conception of these terms. In ideographic writing, each picture stands for, and is intended to arouse in the mind of the reader, the idea of the object depicted, or some closely related idea. In such a system the picture of a man represents a man, and the reader is to understand that the rest of the text will tell him something about the man. Similarly, a crescent may be used to represent the moon, or, symbolically, a month. Pictures of a bee, a boy, and a cottage appearing in ideographic writing would make it certain that the text had something to say about a bee, a boy, and a cottage. Ideographic writing often copies gesture-language; thus the picture of a man pointing to his mouth may represent speaking or eating, and one of a man with his head resting on his hand may betoken sleep. Like gesture-language, ideographic writing has the advantage that it can be understood equally well by people speaking different languages, and the reader may be wholly ignorant of the language of the writer. On the other hand, it has the disadvantage of being restricted almost wholly to the representation of tangible objects, or of ideas readily represented symbolically, and of lacking clearness and precision, so that it is likely to be more or less obscure and liable to misinterpretation.

16. I know of no sure case of European ideographic writing and shall therefore illustrate such writing by an excellent instance from Alaska.

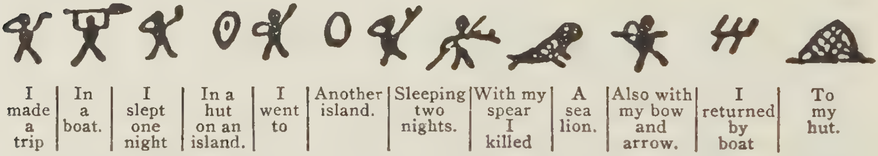
I made a trip
In a boat.
I slept one night
In a hut on an island.
I went to
Another island.
Sleeping two nights.
With my spear I killed
A sea lion.
Also with my bow and arrow.
I returned by boat
To my hut.

FIG. 1.—Alaskan ideographic writing (Bureau of Ethnology, *Fourth Annual Report* [1882–83], Figure 147)

17. Such, then, is ideographic writing. In acrophonic writing, on the other hand, a pictograph is intended to suggest to the mind of the reader only the name of the object depicted. Thus, in this kind of writing the picture of a man represents the word for man in the language involved, or, more usually, it represents only the beginning of that word. If we assume English as the language to be written acrophonically, the picture of a man could represent the syllable *man* and, while it might spell the word man and thus refer to a man, it may just as well spell the syllable *man* in the word *manner,* or *manifold,* or *talisman,* or *human,* or *demanding.* And it might be used to represent only the syllable *ma,* as in *ma-the-ma-ti-cal,* or *com-ma.* In an English text written acrophonically, the pictographs of a bee, a boy, and a cottage might spell the English words *bee, boy, cottage,* but they could just as readily be used to spell the words *be* and *boycott.* In order to read a text written acrophonically, one must be acquainted with the particular language in which it is written.

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[23] The term "hieroglyphic" expresses nothing that is not better expressed by "pictographic" and "ideographic," and is best avoided.

18. How easily ideographic writing may develop into acrophonic writing may be seen from a supposititious English case. As a man could be represented by a picture of a man, such a picture of a man could consistently be used also in writing the first syllable of *man-hole* or *man-trap.* This is still ideographic writing. But if a picture of a man could be used in writing *man-hole,* it would be tempting to use it also in writing such words as *manhood, mandrake,* and *mandate.* And when *man-hood* was written with a picture of a man and a picture of a hood, and *man-drake* with a man and a drake, and *man-date* with a man and a date, the step from ideographic to iconomatic writing had been taken.[24] Now although iconomatic writing thus grows out of ideographic, the two types are utterly different in principle, so that any attempt to read an acrophonic text as though it were ideographic must fall very wide of the mark.

19. Ideographic elements are sometimes retained in acrophonic writing,[25] just as little pictures are often used in calendars or dictionaries to represent phases of the moon, classes of words, etc. (Thus a cross is used to mean 'died,' or 'obsolete.')

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[24] [Well-developed ideographic systems, such as the Chinese, are able to render the most abstract and complicated concepts, thanks to an ingenious method of combining symbols. The determinant fixes the precise meaning of the basic symbol very much as the context sometimes fixes the meaning of a word in a sentence. The only unsurmountable difficulty for such a system is offered by proper names which do not closely correspond to any other kind of word in the language. Since most native Chinese names are (formally) identical with words, exotic names were the only embarrassing problem which the script had to encompass. But in the earliest texts we possess, Indo-European proper names are distinguished from ordinary words in a rather large number of cases. Even when the radical element lends itself readily to ideographic representation, the suffix cannot be represented. It is therefore rather likely that the development of iconomatic writing was in some way connected with this predicament.—F. A.]

[25] [It is significant that those systems which we definitely know to have developed out of ideographic writing never wholly rid themselves of ideographic elements; and it may be for this reason that they never progressed in the direction of alphabetic writing. If the Minoan script were the outgrowth of a primitive ideographic system, native to Crete, it would almost certainly contain a far larger proportion of abstract and metaphorical symbols than it does. As a matter of fact there are only two or

20. Since acrophonic writing is the most primitive form of phonetic writing, it does not admit of exact phonetic distinctions. If English, for example, were to be written acrophonically, such a word as *big* would have to be spelled with a picture of a pig, a pick, or a beak, no one of which represents the sound *big* exactly. In Greek acrophonically written, a syllable containing β, π, or φ may be spelled by pictures whose objects have names beginning with any one of these sounds, and the like is true of δ, τ, ϑ, and γ, ϰ, χ; even the similar vowels ο and υ, ε and ι are often treated alike, as will presently appear. Owing to this inexactness of spelling, acrophonic writing could seldom be read at glance, and was sometimes ambiguous. This defect was partially remedied by means of a clumsy device, namely, the use of variant cumulative spellings. In the Minoan pictographic writing, for example, the word τυπος, "stamp," "impress," "seal," is spelled in many ways, but most often by *door-leg,* or *door-leg-silphium,* that is: ϑυ[ϱα] -πος or ϑυ[ϱα] -πος -σ[ίλφιον] with cumulative spelling of the -ς. According to the loose general system of this script, the leg or foot usually represents one of the syllables πο, βο, φο, and the picture of the sylphium plant (which theoretically should spell σι) served roughly to remind the reader that the word in question ended in -ς. This phonetic inexactness was frequently carried over into the syllabic writing into which acrophonic writing developed, and which we shall next consider.

21. In acrophonic writing a picture could stand for the first sound of its name, σ-, υ- (for example), (*M.,* 20); but this was rarely the case if the first sound was a consonant. Usually the picture stood for the first syllable or two, or for the whole name, for example, πα-, τϱα-, ὄψον, etc. In the vast majority of cases it stood for the first syllable. And just in this proportion, acrophonic writing was, from the very first, syllabic in character. In time scribes came to regard the graphic devices—often mere skeletons of the earlier pictures—as written characters for sound groups rather than

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three Minoan pictograms which suggest a metaphorical origin: the "worker" sign (§ 50, *infra*) is the clearest case. There is nothing comparable to the Egyptian symbols for "old" (a stooping man), for "large number" (a man holding up his hands in surprise), "inertness" (a figure with drooping arms), etc. It is therefore probable that the Minoan script was acrophonic from the outset. Certain Minoan pictograms are obviously borrowed from Egypt; the majority seem to have been independently devised. Apparently, then, the Minoan script is a very free imitation of the Egyptian, omitting the ideographic elements of the latter. If this is true, it furnishes additional proof of Dr. Hempl's general theory: that the successive changes and simplifications which led to the development of purely alphabetic writing were occasioned by borrowing.—F. A.]

as pictures of objects whose names were to be thought of; and they were likely to teach them in much the same mechanical way. Moreover, in teaching and in learning, it was natural to begin with the simplest signs, that is, with those that spelled single syllables, and to postpone those signs that stood for two or more syllables. And it was equally natural, when the signs for single syllables had been learned, to use two of these to spell two adjacent syllables, without stopping to think whether there was in use a sign for the two syllables together. In this way, signs that did not stand for a single syllable were likely to disappear, leaving the system purely syllabic.

22. There are various kinds of syllables, for example, *a, at, ta, tat, tra, trap, tarp,* etc., and all these kinds of syllables are found in primitive syllabic writing. But most words begin with a consonant, and so most names of objects that could be used in acrophonic writing began with a consonant, and in this way it happened that most syllables used in syllabic writing began with a consonant. Thus it was not strange that in dividing words into syllables, for writing, the consonant that stood between two vowels was placed with the following vowel. And all this led to the dominance of orthographic syllables beginning with a consonant and ending in a vowel. When this general condition was considered as normal, and the signs were avoided that represented other kinds of syllables, ordinary syllabic writing had become restricted syllabic writing.[26]

23. Cuneiform writing got rid of syllables containing two adjacent consonants, but it never took the full step from general to restricted syllabic writing, and thus could never develop into an alphabetic system. It contains, for example, not only syllables of the type *ba, pa, si,* etc., but also syllables of the type *ub, pad,* etc. It was further hampered by the fact that a single symbol sometimes had several very different forms, and by its use of ideograms (*CH.,* § 6), that is, symbols that represented a word or an idea rather than a sound, such as SAG which may be used to represent *rêšu,* 'head.'

24. The most familiar restricted syllabic writing is the Cyprian script. It was rarely used for writing anything but Greek, yet it has hitherto been generally regarded as of "barbarian" origin, presumably because of its inexactness.[27] In point of fact it is one of the various developments of

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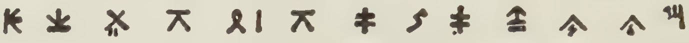
[26] [Sections 23–31 (which were somewhat roughly sketched in the original) have been partly rewritten. The substance of them is taken either from the manuscript or from lantern slides. Dr. Hempl had not indicated what text was to be used as an illustration of Cyprian; I have therefore used the one I found in Taylor and Gardthausen, which presents nearly all the peculiarities of the script.—F. A.]

[27] [The deficiencies of Cyprian writing are for the most part general; that is, it is no harder to write Greek with Cyprian letters than it would be to write any other

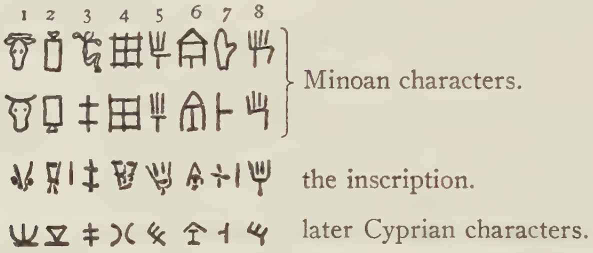
Minoan acrophonic writing, a fact which is clearly shown by the comparison of certain archaic Cyprian characters with the Minoan signs. As I have



Ετεα[ν]δϱο τοῦ Πάφου Βασιλεύς

FIG. 2.—Illustration of Cyprian writing from a golden bracelet. (After Gardthausen, *Germanisch-Romanische Monatsschrift,* I, 176.)

dealt with these early Cyprian inscriptions elsewhere ("Early Cyprian Greek" = *ECG.*), I shall here cite only one of them:



	1	2	3	4	5	6	7	8
Cyprian values:	*bu*	*ra*	*pa*	*csa*	*qe*	*si*	*ta*	*qe*
=	Βο-ϱα		πα-σκα		*q*ε	σι-τα		*q*ε,
Attic:	Βοϱὰ		πάσκος		τε	σῖτος		τε

'Meat and clay and grain.'

FIG. 3.—Derivation of Cyprian characters as shown by the inscription on a clay ball found at Enkomi (*ECG.,* § 8).

25. But Cyprian is not the only form of syllabic writing which evolved from the Minoan acrophonic script; other similar systems existed in other parts of the Greek world—probably in Crete itself, as appears from the inscription on the Goulas cup, which I have explained elsewhere.[28] For

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language. And the traits which are really peculiar to Cyprian seem to me to favor Greek: it has not enough sibilant characters for the writing of a Semitic language, nor enough velars and dentals for Egyptian.—F. A.]

[28] *ECG.,* § 14.

continental Greece, the inscription on the vase discovered by Bulle at Orchomenos furnishes a good example.

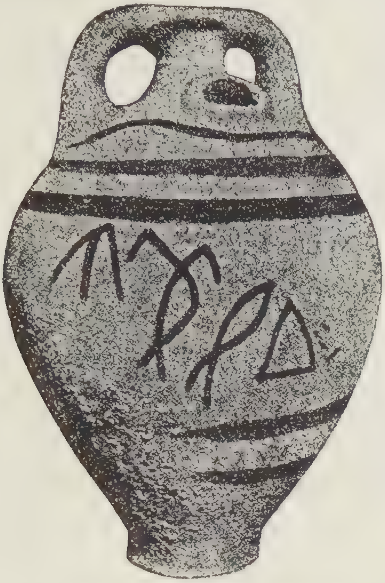

FIG. 4.—Inscription on a stirrup-vase from Orchomenos (*Scripta Minoa*, p. 57). The inscription reads: ᛦ ɤ ℓ Δ :/

The corresponding Cyprian characters would be:

𐠊 𐠖 𐠅 𐠀 = *ka-mi-ya-a*

= Attic χημία, with the numeral :/ = "13."

26. Let us now consider the change of restricted syllabic writing into penalphabetic writing. It will be remembered that in restricted syllabic writing (§§ 22–24, *supra*), there are for every consonant five different signs, one corresponding to each of the five vowels; or, to put it otherwise, there are five rows of consonant signs, one corresponding to each vowel. The Cyprian system did not form the basis of the Greek alphabet, but a sister system did. In these two systems the *e*-consonant signs not only represented the syllables *be/pe/phe, ge/ce/che,* etc., but also had the special function of representing final consonants, the inherent *e* being here understood to be silent.[29] In fact, when so used, the characters were virtually

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[29] Compare the English spellings of *stove* and *ripe* as contrasted with *apostrophe* and *recipe.*

pure consonant signs. Of this we have positive knowledge in the case of the Cyprian syllabic writing; while the forms of the names of the Greek letters make it clear that the same was true of the syllabic system out of which the Greek alphabet grew, as we shall see directly (§§ 32 ff., *infra*). Now, in teaching restricted syllabic writing, it was at some time or other observed that children could best be introduced to the art of writing if they were taught at first only these *e*-consonant signs and the five vowel signs. For as soon as they had learned these few characters they could write in a way that was perfectly legible to those familiar with all the signs.

27. Of course the simplification which ultimately led to alphabetic writing did not occur in Cyprian, but in some similar system whose identity has yet to be discovered. It is convenient, however, to illustrate the process by showing how it might have been carried on in the Cyprian script. Here, as in other syllabic systems, there were symbols for the principal vowels, required for writing words beginning with a vowel or containing two adjacent vowels. A person who knew only one column of the consonant signs—let us say the column of those which implied a following *e*-vowel—might, by combining these with the vowel-signs, get on without the other consonant-columns:

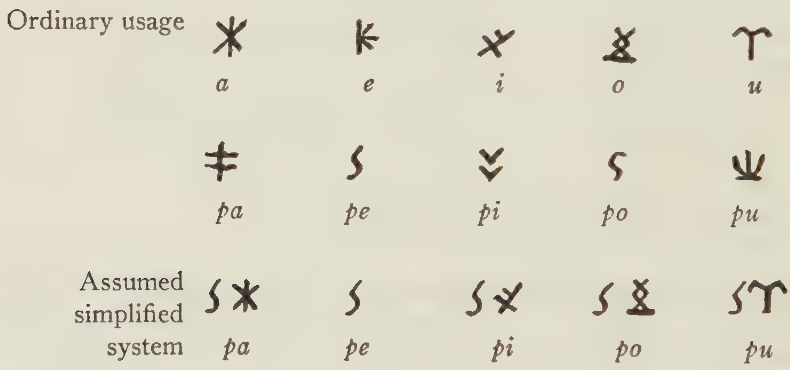


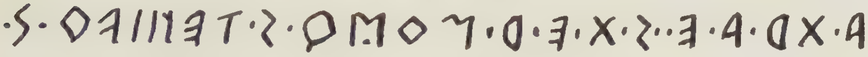
FIG. 5—Table illustrating how syllabic scripts might be simplified

28. The syllabic system compelled the child to learn ten signs; the simplified method required six. For two consonants the proportion was 15 to 7; for three, 20 to 8; for four, 25 to 9; etc.; that is, for every new consonant, five new signs in the syllabic system to one new sign in the simplified system. The advantages of this simplified writing could not but make themselves manifest. It saved the pupil an incalculable amount of

time, which he could devote more profitably to other studies, and it permitted such children as could spend but a short time at school to master reading and writing at least. As the children who had learned this system grew up, the old complicated syllabic system was permitted to die out, though, doubtless, not without the indignant protests of many of those who, having spent much time and effort mastering it, assigned to it a value and importance that it did not intrinsically possess.[30]

29. The simplified writing which thus arose was not yet purely alphabetic, inasmuch as each consonant sign still implied the vowel *e* (or *a*) unless the letter for another vowel was written after it, or the silence of the *e* or *a* was implied or indicated by some mark like the virama. Writing of this type we may call "penalphabetic."

The Inscription:



In usual Latin order and in Latin letters:

· A · TRA · E · · S · T · E · R · MON · YO · S · TEIVO · S :

Ad ara est ermonyos deivos
'The divine Hermonius is at the altar.'

Fig. 6.—Example of Venetic penalphabetic writing (the latter half of inscription 267 in Pauli's *Alt-italische Forschungen* [to be read from right to left]). The principles of this script are well illustrated by the first five letters, · *a* · *tra* · *e* · · *s* · *t*. The initial *a* must be written (with avagraha dots · ·). But the consonant sign *t*, having no virama dots, implies a following *a*, giving *ata*. An *a* must be written after the *r* because otherwise we should read *re* instead of *rae*. Strictly speaking, the avagraha dots about the *e* should suffice to show that it is independent of the *r*. The virama dots about the *s* show that no following *a* is implied; otherwise we should read *esat*.

30. Naturally, in writing of this type there is a temptation to treat the vowel *a* (or whatever other vowel is implied by the consonant signs when not affected by the virama)[31] exactly like the other vowels, that is, to write it out, in spite of the fact that it is implied by the consonant sign. When the practice becomes the rule, penalphabetic writing has given place to alphabetic writing.

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[30] It hardly seems necessary to call attention to the close parallel between this reform in writing and the proposed reform in English spelling. Practically every argument that is urged against the latter could have been urged against the other, and both reveal the same psychology and the same human weaknesses.

[31] The virama occurs on the Phaestos Disk, in Venetic, early Etruscan, early Runic, and in Sanskrit. In Venetic, Runic, Etruscan, and Old Sabellic, in the West, and in Ethiopic and Sanskrit in the East, the "implied vowel" is *a*. Since most of the

31. It must not be assumed that the change from general syllabic writing to restricted syllabic writing and later to penalphabetic and alphabetic writing took place all over the Greek world at one and the same time. Each such process doubtless started in one important community and from this gradually spread to others, much as the Ionic alphabet displaced the native script at Athens. Cyprus, because of its insular position, longest remained immune to such innovations; in fact, so long that the forms of the letters in the two systems had time to become differentiated to such an extent that it was not easy to recognize in the Cyprian syllabary the characters corresponding to the restricted list found in the Greek alphabet.

32. There can be but little doubt that for most Greek peoples the coming of the alphabet was merely the coming of a simplified form of writing, and that it meant the use of few if any new characters; only the restriction of those already in use to such as sufficed to express the simple vowel and consonant sounds. This is proved by two facts. In the first place, in certain remote districts local forms of some of the letters continued in use—forms that never appear in Semitic and that cannot be derived from the Semitic forms. Secondly, the Greeks continued to use the signs for vowels as they had always used them, betraying no knowledge of the consonantal use to which the Semites put them.[32]

Greek letters are derived from the *e*-column, we should expect the Western penalphaphabetic systems to have consonants which implied the vowel *e*. The explanation of this phenomenon is somewhat complicated. When the signs of the *e*-row in the Javonian syllabary that formed the basis of the alphabet came to displace all the other consonant signs, and this restriction spread to the non-Javonians who had passed some of the *e*-signs to the *a*-row thus causing a mixture of *a*-names with *e*-names (see § 36, *infra.*), these non-Javonians had been in the habit of using in final position the consonant signs that implied *a*, and they now treated the consonant signs of their restricted list in the same way, viz., as implying *a*, although only a part of them had originally belonged to the *a*-row.

[32] [The resemblance between the Cyprian symbols for *a*, *e*, *o*, and *u*, and the corresponding Greek vowel signs is rather striking, especially in view of the interval that separates the two scripts. But if the two sets are related, they must be derived from a much earlier set of vowel symbols, and in this case the Phoenician usage cannot possibly be original. See Table, § 50, also § 43, *infra*.

Even stronger evidence is the fact that in the so-called "hellenizing alphabets" (Carian, Iberian, etc.) we find a score of letters that never have appeared in the Greco-Phoenician alphabets, but obviously come from the same source as our letters, since they present the same resemblance here and there to the Cyprian and Minoan symbols. As Dr. Hempl has pointed out (§ 38, *infra*) they are signs rejected in the process of simplification in one locality that lived on in another.—F. A.]

Scanning the names of the Greek consonants, we find—

βῆ-τα
γέ-μμα
δέ-λτα
ζῆ-τα
ϑῆ-τα
ξεῖ[33]
πεῖ
φεῖ
χεῖ
ψεῖ

γά-μμα
ϰά-ππα
λά-μδα
τα-ῦ

μῦ
νῦ

ϱῶ

σί-γμα

Though some of these forms may be analogical or otherwise secondary, collectively they prove that we here have the reflection of a syllabic system in which the consonants of the *e*-column had been used in spelling final consonants, the *e* seen in Phoenician being represented in Greek by the short ε before two consonants or a double consonant, by the long open η before a single consonant, and by the long close ει when final—the last being the same development as that seen in εἶ, the old name for ε. The evidence becomes even stronger when we remember that ἦτα was originally ʽητα, that is, *h*η-τα (Phoenician *cheth*), in other words, also the name of a consonant; and that the name of μυ is not original, it having got its υ by analogy to νῦ, the Phoenician name being *mēm*, 'water,' an adaptation of the Minoan μή(νη), 'meniscus.' (*M.*, 21.)

34. It must, however, be clear also that the Greco-Phoenician alphabet does not represent the system of syllabic writing in which the simplification originally took place, for that simplification was made by discarding all the consonant signs except those in the *e*-column, and so we should expect all the names to have an *e*-vowel. Considering these two facts we cannot but infer:

a) That we have to do with two systems of syllabic writing that were much alike. The first (if not both) of them, like the Cyprian system, used the *e*-consonant signs (i.e., those which implied consonant + *e*) to spell final consonants. Furthermore, in this system (which we may call Script No. 1) all the consonant signs except those in the *e*-column were discarded; in other words, it is in this system that the simplification originally took place.

b) That the simplification was then adopted by people using the closely related system (which we may call Script No. 2). There is more than one way in which this adoption might have been made. The users of Script No. 2 might have imitated the principle of selection which guided the users of Script No. 1; that is, they might have restricted themselves to the use of the consonant-signs that in their script were employed in spelling final consonants but elsewhere implied the vowel *e* or *a,* as the case might be. Or they might have adopted merely the result of the original simplification restricting themselves to the use of the particular letters (not necessarily with exactly the same form) which the process had given the people employing Script No. 1, regardless of what column these letters belonged to in their own Script No. 2. It is evident that the latter and more mechanical course was pursued. The people using Script No. 2 merely adopted the selection already made, which resulted in their getting signs, most of which still belonged to their *e*-column, but some of them to other columns.

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[33] The familiar ξῖ, etc., are of medieval origin. For *tau*<*ta,* cf. § 40, *infra.*

35. It may well be asked how it could happen that two closely related scripts could have the same characters in different vowel-columns. It could happen in various ways. The most patent cause doubtless was difference of dialect. It will be observed that in nearly all cases of deviation we find an *a*-vowel for an *e*-vowel—the commonest dialectic difference in Greek. Thus Javonian νη(ός)/νε(ιός), 'temple,' naturally put *n* in the *e*-column in Script No. 1; but its earlier form appears in the Cyprian system in the *a*-column because of the non-Javonian forms ναός/ναῦος.

36. It should be noted, however, that the interchange of *e/a* is not necessarily due to the fronting of the old long *ā* to η in Javonian. Thus the η in Attic κῆλον, 'arrow,' is original *ē,* occurring in Pindar as well as in Attic; still, κῆλον cannot well be separated from κάλαμος, 'stalk,' Sanskrit *Çāri-h,* 'arrow,' and it is evident that we here have the explanation of the fact that the arrow spells *ce/qe,* etc., in Hittite and Minoan, but stands in the *a*-column in Cyprian.[34] And it is probable that certain consonants had originally *ē* which became *ā* on passing into or through non-Javonian speech. For instance, the *a/ā* of *gamma* corresponds to the *e/ē* of Ionic *gemma,* which reflects the name *ge* that grew out of *γένυ (Latin *genu*),

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[34] Other shifts to or from the *e*-column may be observed in the Cyprian system:

μη Minoan

ŭ Lydian

mi Cyprian

Minoan *si* σί(λφιον) (cf. § 50, *š infra*) assumed the value *se,* replacing the old *σε(ρπετόν), 'snake,' which was no longer available, having become ἑρπετόν. In some systems the SERPENT (cf. § 50, s. Cf. also *SM.*, I, 211, No. 84) was retained but was given the name σίγμα, 'hisser,' which spelled *si* or *s.* This σίγμα suffered metathesis in Semitic and appears in Hebrew as *samekh* (cf. § 49, *infra*).

while the Cyprian *gō/cō* grew out of its mate γόνυ.[35] The same is true of *kappa,* Cyprian *cā,* whose *ka/kā* goes back to the *kē* of κῆλον. Also, *nē* and *csē* became *nā* and *csā* in Cyprian, but not in the alphabet; *lē* became *la/lā* in *lambda* but *lī* in Cyprian; *dē/tē* became *tā*[36] in Cyprian and also in the alphabet; in the latter, however, it later became ταῦ under the influence of the following υ (see § 40, *infra*). In the Javonian system which suffered simplification, the sign for *sī* was evidently often used for *se* as well, just as the Cyprian sign for *ne* is sometimes used for *ni* and *vice versa.* It thus appeared as one of the restricted list of *e*-consonant signs. In the system that formed the basis of the alphabet, however, it had retained its original name *sī,* later remodeled to *sigma.* In Semitic, *rē/rō* picked up the *š* of the following *šin,* and became *rēš/rōš,* 'head,' the letter looking something like the side of a head on a long neck. While Greek *rho* might be regarded as from Phoenician *rōš,* it is more likely a return to the earlier *ro* seen in Cyprian, derived from an early dialectic *ϱοκτηο, 'worker,' with ο from ϝοϱγανος, ϝοϱγανον, cf. English *work.* (See § 50, R, *infra.*) We have seen (§ 35, *supra*) that *ne* became *na* in Cyprian; in the syllabic writing which formed the basis of the alphabet, it had got the name *nūn, nū,* identified by the Phoenicians with the Semitic *nūn,* 'fish,' and taken over from the cuneiform system. On the analogy of this νῦ, the name of the preceding letter μ later changed from *mē* to *mū;* much as in Phoenician it changed from *mē* to *mēm* by analogy to *nūn,* which in turn, by analogy to *mēm,* sometimes became *nūm.*

37. Furthermore, some of the communities that adopted the restriction of consonant-signs, directly or indirectly, from those who simplified their syllabic system, nevertheless continued to use a few other signs, which enabled them to make distinctions such as the aspiration of voiceless mutes. For example, in what we call the Western Greek alphabet one form of the old sign of the hand χεί[ϱ], which was at first used to spell either *che, he, ce, qe,* or *ge,* was retained as a letter for *ch* alone, with the name χεῖ (very late χῖ), while another form held a place in the alphabet as the letter for *he* (i.e., 𐌇). For the development of the forms, see § 50, *infra.*

38. Some neighbors of the Greeks, who used restricted syllabic writing, adopted the limitation of characters but permitted the continued use of others, either as variants or as means of representing special sounds or varieties of sound. Such was the origin of such alphabets as the Lycian, the Carian, the Iberian,[37] etc.

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[35] Cf. Hempl, *ECG.,* § 244.

[36] But there was another cause for this change; cf. *ECG.,* § 239.

[37] We may distinguish: 1. Minoan characters which were not retained in Script No. 2 after it had been simplified (§ 34, *supra*), and which thus did not become a part

39. That the Greco-Phoenician alphabet and related alphabets are derived from the Minoan linear characters, as Evans urged (§ 11, *supra*), there can no longer be any doubt (see also § 32, *supra*). I have therefore refrained from commenting myself on the further question of the relation of the Phoenician alphabet to the Greek alphabet. We have seen (§ 4, *supra*) that it is generally assumed that the Greek alphabet was adopted from the Phoenician, but that Dussaud derived the Phoenician from the Greek. There are certain phenomena that seem to favor the latter theory, but they are of too complicated and uncertain a character to admit of discussion here. On the other hand, certain serious difficulties are removed if we assume that the traditional derivation of the Greek alphabet from the Phoenician is correct. It would be difficult to explain away the remarkable agreement between the order of the Greek letters and that of the cuneiform ideograms (§ 6, *supra*) if we were to deny that the Greek alphabet had passed through the hands of the Phoenicians. I do not think that we are at present in a position to come to a positive and definitive decision in the matter. Tentatively I hold to the traditional doctrine, but not in its crude form. In any case, the share that the Phoenicians had in the whole matter cannot have been large. Certainly it was not they who simplified the restricted syllabic writing of the Minoans. The fact that the Phoenician names of the letters reflect earlier syllables of the *e*-consonant row (§§ 34 ff., *supra*) proves beyond any question that the simplification took place in a community speaking Javonian Greek and that the use of the alphabet of limited characters passed through one or more non-Javonian communities before it made its way to the Phoenicians. Thus far the evidence of Phoenician participation seems to point only to their having arranged the characters in an order that they were familiar with in the cuneiform writing which they employed before they took up with Minoan writing; and to their having slightly modified the forms and to some extent remodeled the unmeaning Greek names of the characters, chiefly through association with similar-sounding Semitic words. All this is perfectly consonant with the gradual spread of the Phoenician way of writing to peoples already employing Minoan writing of a more original character, and also with the early representations of the Cretans, that the Phoenicians did not invent letters but simply modified their form, and that, as their convention became general, their name became attached to the writing (§ 4, *supra*). As has been

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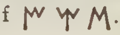
of the Greco-Phoenician alphabet. They did remain, however, in other (syllabic) systems until, at a much later date, these too were simplified. We must assume that this later simplification was less rigorous, and permitted the retention of a few signs rejected in the first. 2. Variants of a single original character which became differentiated. Compare Y X (§§ 50, 56, *infra*) and the use made in Lydian of .

pointed out by others, it should be remembered that, if the early Greek alphabet ending in Y is derived from the Phoenician alphabet, this does not imply that the Phoenician alphabet involved was identical with what we know as the Phoenician alphabet, nor that all deviations from the latter that we find in the early Greek alphabet are to be laid at the door of the Greeks. It is true that, to some extent, the Phoenicians maintained conservative elements from which the Greeks departed; but the Greeks, on the other hand, were conservative in certain matters wherein the Phoenicians permitted change. The most important of these was the loss of the final *u* from the Phoenician alphabet. From the alphabetic Psalms XXV and XXXIV it is clear that, at the time they were composed, there stood at the end of the Semitic alphabet, after the letter + *t* a labial fricative consonant with a name of the type *wē/ƀē*. To suppose that this was secondary and that the phenomenon, while parallel to that of the assumed secondary addition of final Greek Y, was quite independent of it, too severely taxes one's credulity. It is, however, not difficult to show that Semitic Y was originally the sign for the vowel *u* and stood at the end of the alphabet, quite independent of the consonant sign F *w*.

40. The Greek letter T appears in Cyprian syllabic writing as ⊦ *ta*. In the alphabet this + *ta* was followed by Y *u*. In repeating the alphabet, it was almost inevitable that *ta u* should become *tawu*,[38] which was then resolved into *tau u*, whereby + got the name *tau*. As the character coincided with the *punct* ✚ (*M.*, 20), the name *tau* got in Semitic the meaning 'punct,' or 'mark.' This explains the failure to discover a Semitic etymology for *tau*, 'mark.' In the Greek status F *we*, T *tau*, Y *u* persisted for a long time. But in Semitic, Y *u* became confused with the cognate consonant F *we*, whereby either F or Y could spell *w*, and Y, standing after + *tau*, got the name *wau*. In time Y = *wau* ousted F *we* and took its place in the alphabet, which thus came to end in + *tau*. It would, obviously, be impossible to explain all these phenomena on the supposition that the Greek alphabet had been derived from a Semitic alphabet ending in +, and that Y was placed at the end at a later time.

41. An excellent illustration of conservatism in the Greek alphabet is furnished by the sibilants—

Phoenician I *zayin*, 𐤑 *tsādē*,
Greek I ζῆτα, Ϻ σαν.

While these letters occupy the same positions in the two alphabets and have deviated from one another but little in form, it is evident that they have exchanged names, and consequently values. That the Greek status represents the original is clearly shown by the fact that Semitic *zayin* is nothing but Greek σαν, which stood in the early Greek alphabet just after πεῖ, that is, where 𐤑 *tsādē* stands in the Phoenician alphabet. The change of σαν to *zayin* was due to the influence of *ʿayin,* the Semitic name of the preceding *o.* Unless *zayin* had once been the name of 𐤑 and thus come almost immediately after *ayin,* it would never have changed from σαν/*zan* to *zayin.* In this connection I may call attention to the fact that it is necessary to avoid confusion of the Greek ζ and the Phoenician *z.*[39] The Greek letter had the values *st, ts, dz,* and only at a comparatively late date the value *z* (§ 50, Z), while *z* was the normal Phoenician sound. Thus the change of *tsādē* to ζῆτα is really a change of *tsādē* to *dzētā,* an unusually interesting case of metathesis. How it happened that the two letters I and 𐤑 exchanged names and values is seen at once when we consider that they were mates in the crosswise recitation of the letters arranged in two columns beginning, respectively, with α and λ, as shown in § 45, *infra.* This is only one of several shifts that took place in the sibilants in Phoenician, while in Greek they maintained their ancient positions. The assumption that the status of the sibilants in the ordinary Phoenician alphabet is the original status, and that the Greek status was due to various deviations from this, has led to many useless attempts to explain the latter in connection with Greek phonology; see, for example, Larfeld, §§ 150 ff. As the problem is one of Semitic alphabetics, its treatment would be out of place here. I will merely refer to the fact that not only was I confused with 𐤑 but the similarity of I *ts* and 𐤎 *cs* early led to their confusion too,[40] at the same time pointing out the fact that this phenomenon is illustrated also by Pamphylian ⧗ ξ and South-Semitic ⧗ ζ. The letter ⧗ is a simplification of ⊠ = ⊞ and stands to runic ⋈ as 𐤎 stands to the Ⱨ of Argos, Amorgos, etc. For ⊠ ⋈ ⧗ in Italy, see Pauli, *Alt-italische Forschungen,* III, 154 ff.

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[38] Compare the weak *w* heard in such English words as *ru(w)in* and *po(w)etic;* also the change of early Modern-English *no one* (= *nō ōn*) to *nōwōn*, whence the present pronunciation of *one* as *wun*.

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[39] Larfeld, *Griechische Epigraphik,* third edition, p. 205, says that the Phoenician names *zayin* and *tsādē* do not appear in Greek and that ζῆτα arose out of *zayin* under the influence of the following ἧτα, θῆτα, etc. That is, he did not distinguish between the initial consonants of Phoenician *zayin* and Greek ζῆτα, and did not identify *zayin* with σαν, and *tsādē* with ζῆτα. Roberts, in *An Introduction to Greek Epigraphy,* p. 8, recognized the identity of *tsādē* and ζῆτα.

[40] Kretschmer, *Mittheilungen des deutschen archäologischen Instituts in Athen,* XXI, 432; cf. Earle's article, *American Journal of Archaeology,* VII, 440. Larfeld's attempt (p. 223) to interpret this 𐤎 as σσ, rather than as ζ was unfortunate, being based on the assumption that in the name Ƶευς and in this word only, *der weiche ζ-Laut . . . . durch scharfes ss ersetzt wurde,* only to suffer *frühzeitig eine Erweichung des scharfen Sibilanten,* in defiance of all phonetic process.

42. The conservatism of the Greek alphabet does not consist simply in the more rigid maintenance of elements that it got from the early Phoenician alphabet. For we also find in the Greek alphabet the reassertion of (general or local) Greek usage that antedated the adoption of Minoan script by the Phoenicians. The fact must not be lost sight of that the adoption of the alphabet meant to most peoples nothing but the adoption of the Phoenician alphabetic order and of the forms that the names of the letters had assumed among the Phoenicians, and the abandonment of those characters in the native syllabic writing that were not included in the Phoenician limited list; see § 39, *supra.* Thus in Minoan writing, the eye, ὀφθαλμός, spelled *op* (*M.*, 21, *eye*), and in Cyprian syllabic writing had got the value *o* (§ 50, *infra,* O). When adopted into Phoenician, the character was recognized as an eye; it, therefore, received the Phoenician name *ʿayin,* 'eye,' and the value of the initial consonant ʿ. But when Greeks adopted the Phoenician alphabet, while they left the letter *o* in the place it had acquired in the Phoenician alphabet, they continued to use it with the value it had in their syllabic writing, namely that of the vowel *o,* and, of course, they called it *o.*

43. Similarly, Minoan Greek ∡ 𐀀 ἀ[ϱοτϱον] (§ 50, *infra*), Cyprian 𐠀 *a* (§ 50), when adopted by the Phoenicians, received the name *ʾalf* and represented the consonant ʾ. But in the Greek alphabet the letter A retained its Minoan function of representing the vowel α. In like manner, Minoan 𐀁 ἔ[ϱνος] (§ 50, E), Cyprian 𐠁, was called *hē* in Phoenician and represented the initial consonant *h.* But in the Greek alphabet it retained its Greek function as the symbol for the close *e*/*ē,* later represented by ε/ει. But in the case of the open *ē,* or η, there apparently was some reflex of Phoenician usage. The Minoan spelling was the distaff ἠ[λακάτη] (§ 50, H), of which the linear form ⊟ got in Phoenician the name *hēt*[41] and represented the velar voiceless fricative. In the Greek alphabet the letter was employed from the earliest times not only (1) to represent, as in Minoan, the long open front vowel η, but also (2) to spell the consonant *h,* which latter use seems to reflect its Phoenician value.

44. Unfortunately we do not know with any great degree of certainty the forms of the names that the Greek letters had when they passed into the hands of the Phoenicians. On first thought we might expect the letters to have had names corresponding exactly to their phonetic value in the system of syllabic writing out of which they arose, for example—*be, ge, de, ca, nu, ro,* etc. But it is more than likely that modifications set in at an early date and were followed by other modifications in the course of time. I will cite one clear instance. The syllable *si,* which arose out of σι[τοβολεῖον] was displaced by σίγμα, 'hiss' or 'hisser.' This, in Semitic, was metathesized to *samekh*.[42] *Šin* and *samekh* then exchanged places and signs (cf. *zayin* and *tsãde*, § 41, *supra*), *šin* being the Greek ξεῖ with *-n* taken from its original neighbors *nūn* and *ayin.*

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[41] What meaning, if any, was attached to the name is not determined.

45. On passing to the Phoenicians, the names of the Greek characters were exposed to modification in various ways. There can be no doubt that some of them were influenced by the names that the ideographs for the corresponding phonetic syllables had in cuneiform writing (cf. § 7, *supra*); for example, *alf, bet, dalt, kaf, nun,* etc., Babylonian *alpu, bitu, daltu, kappu, nunu,* etc. Various assimilations of names to one another took place at a very early date. Thus *la* got the *m* that we see in *lamd* from the following *me*(*m*), and *re/ro* became *reš/roš* under the influence of the following *šin* (§ 36). Similar phenomena are observable from the writing and learning of the letters in two columns:

a	l
b	m
g	n
d	χ
e	o
f	p
z	s
h	q
ϑ	r
i	ś
k	t
	u

Thus, in repeating the names line by line, the learner trying to say

'alf, lām; bēt, mēm; gē, nūn; etc.

was likely to say

'alf, lām; bēt, mēm; gēm, nūn; etc.;

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[42] Since *sigma* is pure Greek, Semitic *same*(*c*)*kh* must be from the Greek, which shows that the Phoenician alphabet is based on a Greek system of writing. σίγμα is akin to σῖξις, 'hissing,' and σίζω from *σίγγω, to 'hiss.' It has not been observed that these words are duplicates of σῖγή, 'silence,' σῖγᾶν, 'to keep silent,' OHG. *swīgen.* The forms σιγᾶν, σίζω, etc., show retention of *s* and loss of *w* (ϝ), which is proper initially; the medial loss of *s* and temporary retention of *w,* originally only in compounds like ἀποσϝιγάω, is seen in ἀποϝιγ', 'hush,' and ϝιγανα, 'in silence,' on the Phaestos Disk (*Harper's Magazine,* January, 1911), as also in Cyprian 'ιγα. This treatment of *sw* need not have caused Cuny so much trouble when reviewing the article on the disk.

thus changing *gē* to *gēm* (or *gā* to *gām,* § 36, *supra*) by analogy to the preceding *mēm.*

46. Numerous Phoenician names have no meaning at all in Semitic and their forms have not yet been fully explained. Such as *geml/gaml, tsāde* (= ζῆτα, § 41, *supra*), *hēt* (= ἧτα/ἦτα, § 43), *tēt* (= ϑῆτα), *lamed, qof,* etc. Just what forms the Phoenician names had at an early period it would be difficult to determine. I usually cite the forms reconstructed by Nöldeke on the basis of a study of various Semitic and Greek forms.[43] The names of the consonant letters were probably *bēt, geml, delt, wē, zai, hēt, tēt, kaf, lamd, mēm, nahāš, semk, pē, tṣādē, qef, rēš, šen, tā.* These are the forms deduced by Nöldeke, except for *wē* (φē), *qef, šen,* and *nahāš.* For *nahāš,* cf. Minoan νεος/ναος (§ 50, N), which was retained in Ethiopic as *nahās.* The familiar Hebrew names are such as *bei der Annahme der aramäischen Sprache und aramäischen Schrift in Babylonien mit übernommen wurden.*[44]

47. When the Phoenician names in turn passed into Greek, modifications again took place. Of these, the most noticeable is the final α added to names that would otherwise end in a consonant that no longer appeared as a final in Greek. It is, however, a misconception of linguistic process to say that the Greeks added this α *in order that* the names might not end in such a consonant. They did it without thought, simply being unable to sound the consonants without adding the obscure vowel sound written -α, just as Japanese cannot pronounce a final consonant, but say for example, *dusta-pã* for *dust-pan,* etc. It will be observed that the phenomenon proves that the Phoenician alphabet was adopted by the Greeks after these final consonants had become silent in real Greek words.

48. There is one feature of the alphabet which I have postponed considering because it involves certain matters about which I cannot make as definite statements as I should like. In most primitive writing the voiced stops *b, d, g,* are not graphically distinguished from the voiceless *p, t, k.* This is true, for example, of Cyprian syllabic writing, of Venetic penalphabetic writing, and of Etruscan alphabetic writing. But the Greco-Phoenician alphabet does distinguish these two groups of stops. The question thus arises: How, when, and where did this differentiation arise?

We find *d* and *t* represented by distinct Minoan signs (cf. § 50, *infra*) both of which, however, arose out of the pictograms of objects whose names had *d* in Minoan: the mountain or country sign (Δ), also found in Hittite pictographic writing, whence the later D; and the right-hand (⊢), whence the later **T**. Cyprian ⊢ *ta.* The velars *g* and *k* were represented by distinct signs that arose from pictograms whose names began with γ and χ, respectively: the knee (Γ), and the hand (Ψ). The labials *p* and *b* were differentiations of one and the same Minoan character—the double-axe (cf. § 50, B). The corresponding Cyprian form is still ambiguous, *pe/be.* (Cf. *ECG.,* § 31.)

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[43] *Beiträge zur semitischen Sprachwissenschaft* (1904), p. 134.

[44] Lidzbarski, *Ephemeris für semitische Epigraphik* (1906), Vol. II, No. 3, p. 132.

49. All this goes to show that the graphic differentiation of the voiced stops from the voiceless was secondary and that the status seen in Cyprian was the original. Whether the differentiation arose in the Phoenician alphabet or in one of the syllabic systems out of which the Phoenician alphabet arose I cannot say. The greater or less neglect of the signs β, γ, δ, in Venetic, Etruscan, etc., would make it appear that the syllabic systems out of which these scripts arose (by adoption of the Phoenician simplification) also lacked the differentiation. If we find a script that has letters that provide for this distinction but does not avail itself of the opportunity, we must look, in seeking an explanation, to the syllabic system employed before the adoption of the alphabet. In fact, all alphabetic studies will hereafter demand consideration of these earlier scripts as well as of the alphabets that displaced them.

SYNOPSIS ILLUSTRATING THE DERIVATION OF ALPHABETIC FORMS

50. [Less than one-third of the following synopsis was completed in Dr. Hempl's manuscript. The rest has been supplied from the manuscript of "Minoan Seals," from stray notes, from lantern-slides, or by the editor.[45]

For a discussion of the Minoan pictograms from which the letters are derived, see the list in the next study in this volume (*M.,* § 21).

In assigning values to the Minoan and Cyprian characters I have cited one only. The reader will remember that one character may spell many different syllables. Thus the sign referred to as *te* may spell *te, de, the, tei, dei, thei, tē, dē,* or *thē; ke* stands for *ke, ge, che, kei,* etc., etc.

The letters *a* and *b* under Minoan characters distinguish Linear A and Linear B. The letter *e* under Cyprian characters designates Early Cyprian —forms discussed in "Early Cyprian Greek." A dot between two characters indicates that the second is presumably derived from the first. Otherwise the order in which signs are arranged implies nothing. These dots were supplied by the editor.

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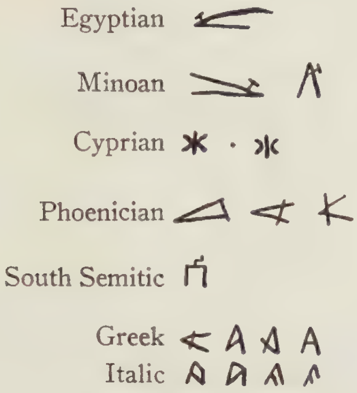
[45] [Many of the notes written by me are merely my guess as to what Dr. Hempl intended, or résumés of *ECG.* In a very few places I have ventured to add a detail or an opinion.—F. A.]

The letters are discussed in the following order:

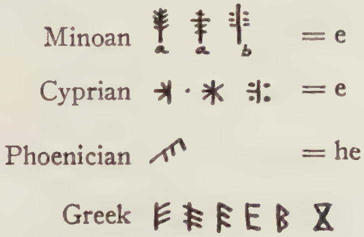
A E 日 I O U B P T ⊕ Δ K ϙ Γ Š S Z N M L R Ψ Ξ.—F. A.]

A, ἄροτρον, 'plow,' *E.*,[46] 27.


Egyptian
Minoan
Cyprian
Phoenician
South Semitic
Greek
Italic

The pictogram was identified by Evans, who did not, however, realize that it was the prototype of the letter *A*. He also observed that the character was usually set on end in order to save space. The curious South-Semitic forms probably developed from a "bulging" character similar to the Oscan but still supplied with a handle. They could hardly be explained if, as is currently held, the letter originally represented the face of an ox.

E, ἔρνος, 'shoot,' *E.*, 97.


Minoan
a
a
b
= e
Cyprian
= e
Phoenician
= he
Greek

According to Evans the *zonerg plant.* The second Cyprian form was produced by extending the oblique lines beyond the staff as happened in the case of *A*. The peculiar form this letter assumes in Minoan Linear B furnishes a ready means of detecting this script.

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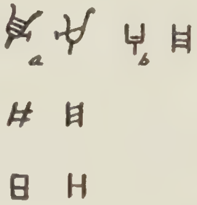
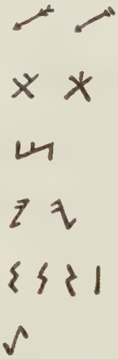
[46] References with capital *E* followed by a number are to Evans's "Catalogue of Hieroglyphic Signs," *SM.*, pp. 181–232.

𐌇, ἠλακάτη, 'distaff,' *E.*, 28, 45.

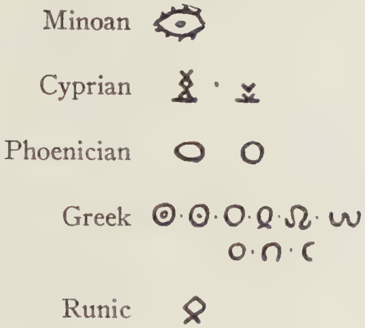


[Evans has suggested both *lyre* and *distaff,* but confesses himself uncertain about the identity of this pictogram. Dr. Hempl's readings of the inscriptions in which it occurs are not very felicitous (he did not include them in the final draft of "Minoan Seals," and the comparison of forms is not convincing. Evans (*SM.*, p. 89) presents forms from all three types of Minoan writing which are practically identical with the Greco-Phoenician 𐌇, or at least resemble it very closely. Since the value of the Greco-Phoenician letter is *hē, ē, h,* we should expect its original to have the value *hē*. The shape of the character suggests an ideogram ἥμισυ, 'half,' which in very archaic Greek must have been *σημισυ.—F. A.]

I, ἰός, 'arrow,' *SM.*, Figure 32.

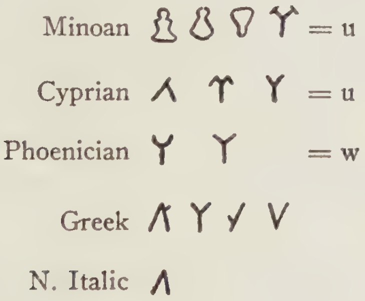


O, ὀφθαλμος, ‘eye,’ *E.*, 5.


Minoan
Cyprian
Phoenician
Greek
Runic

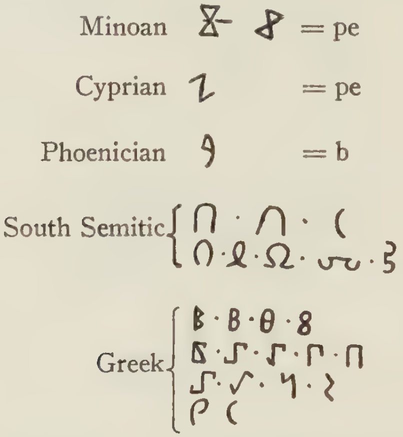
In Semitic the letter was used to spell the consonant sound beginning the word ’ain, ‘eye.’ See § 42, *supra*. [The word ὤψ (compare the Homeric βο-ῶπις) is probably the archaic word for ‘eye.’ The last three Greek forms show how ω evolved from ο.—F. A.]

U, ὑπαγωγεύς, ‘trowel,’ *E.*, 18.


Minoan
= u
Cyprian
= u
Phoenician
= w
Greek
N. Italic

One of the commonest Minoan characters. In Semitic (cf. § 40, *supra*) this letter became confused with **F**, the sign of the corresponding consonant *w*, and ultimately displaced it. See *EI.*, No. 11. [I do not believe the first three Minoan forms are related to the fourth or to the characters below them, and the identification as a trowel seems very doubtful. Perhaps we should seek a word beginning with ω, ὦμος, ‘shoulder with the arm,’ for example.—F. A.]

P, πέλεκυς, 'double-axe,' *E.*, 36; cf. *SM.*, p. 12.



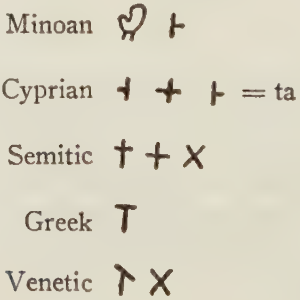
The Minoan character, like its Cyprian derivative, spells *pe phe, be.* From it arose the many forms of the letters *B* and *P*. If the scribe began at the top, he was likely to make > first and then add ʒ which would tend to straighten the first line and produce the normal Greek form, from which open forms were derived (cf. our minuscule *b*). In South Semitic the letter got the value of the cognate nasal *m*.

If the scribe began at the intersection of the oblique lines, he was likely to produce an open form. Such open forms probably evolved even in Minoan writing (cf. *SM.*, p. 228, No. 131, and the graffito inscriptions *P.* 111 and *P.* 112, *SM.*, pp. 175–176).

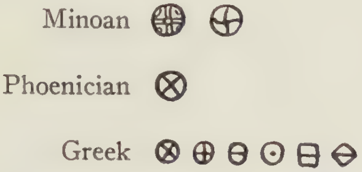
The open forms from which the letter Π arose do not always have the value *p*. In Megara, Corinth, Corcyra, Crete, etc., they spell the voiced *b*, and the same is true of the open South-Semitic forms.

[It is noteworthy that the word πέλεκυς is Homeric.—F. A.]

T, δεξιά, 'right hand,' *E.*, 9.

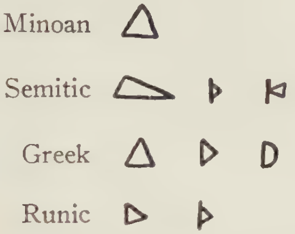


⊕, τ[α]ϱοχός, 'wheel,' *SM.*, Figure 24.



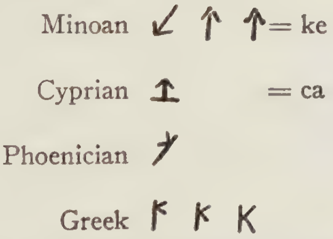
The character ⊢, *te,* was confused with the similar ⊕, +, *ta.* (For the confusion of *e* and *a* owing to dialectic changes see § 36, *supra.*) The two were ultimately differentiated as ⊕ = *the* (that is, ϑῆ-τα) and **T** = *ta,* later *tau.* For a similar confusion and subsequent differentiation compare Oscan **R** = *d* and **D** = *r.*

Δ, δῆμος, 'district,' *E.*, 130.



The triangle is the outline of a mountain and serves universally as a pictogram for 'mountain,' 'country,' 'land,' 'district.' (See Hempl, *TB.*, §§ 50–52). This was observed by Evans. The two South-Semitic forms are clearly the result of a development similar to the one observed in Runic.

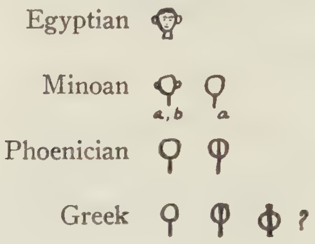
K, κῆλον, 'arrow,' *E.*, 13.



Various forms of the arrow are frequent in Hittite pictographic writing. In both dialects it spells any velar consonant. It reappears as Cyprian *ca.* (For *ca* instead of *cē,* cf. § 36, *supra.*)

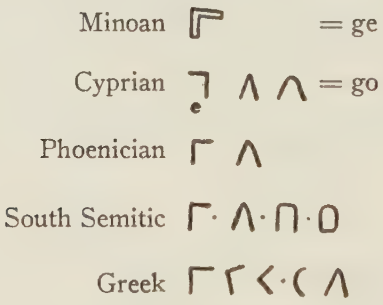
Whether the arrow is actually the source of Phoenician kaph and Greek kappa I am unable to say, but it seems likely.

Ϙ, κύπη, 'head,' *SM.*, page 87 and Figure 28.



[Dr. Hempl suggests κύβη, 'head' (found only in grammarians), and κύμβη, 'bowl.' There are several other words which belong to this group: κύμβαχος, κύβδα, κύπτω. Perhaps κύβη owes its β to κύβδα, where it is from π voiced by the following δ. It is not unlikely that κύπη at one time meant 'head,' at least in certain regions. For the development of this meaning compare Latin *testa,* French *tête,* and the vulgar American English *dome.* If κύπη is cognate with *caput, haupt,* etc., the meaning 'head' must be original.—F. A.]

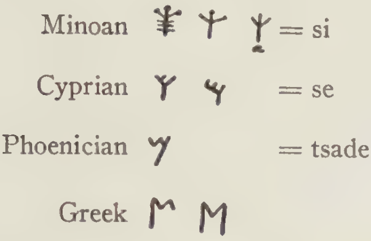
Γ, *γένυ, 'knee,' *E.*, 42.



[Evans notes the similarity of the Minoan character to Egyptian *knb,* 'angle.' Perhaps the similarity between the names is not accidental, the Minoan name being a kind of imitation of the Egyptian. The same sign occurs on the Phaestos disk.—F. A.]

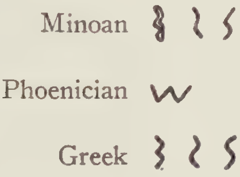
The Cyprian value *go* is from γόνυ, a gradation doublet of *γένυ.

Š, σίλφιον, ‘silphium,’ *E.*, 92.



See *M.*, 21, under *silphium.* For the Phoenician name, see § 41, *supra.* Compare also the Introduction to *LS.; E.*, § 63; and *EI.*, No. 11.

S, *σίκτα, ‘hisser,’ *E.*, 84.

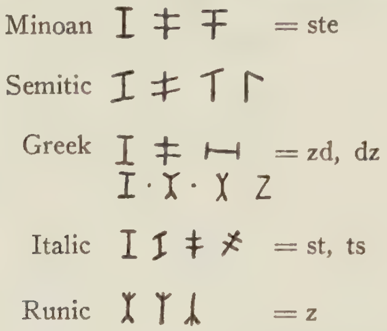


The original Minoan value of this character appears to have been *ser* or *serp*, from σερπετόν, literally, ‘creeper’ (cf. *M.*, 21). Evidently ὁ σίκτα, ‘the hisser,’ could be used for το σερπετόν, ‘reptile,’ ‘snake,’ just as ὁ ἠχέτα, ‘the chirper,’ was used for ὁ τέττις, ‘grasshopper’; and when σερπετον became ἑρπετον, the name σίκτα made it possible to continue the use of the pictogram of the snake with the value *s*. The word *σίκτα is by no means improbable, compare:

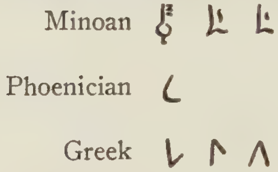
σίζειν	ἠχειν
σῖξις	ἤχησις
σίγμα	ἤχημα
[σίκτα]	ἠχήτα

*σίκτα would appear later as *σίκτης, as ἠχέτα, Doric, ἀχετα, became ἠχέτης. [It is also possible that the name σίγμα, which refers only to the phonetic value of the letter, directly supplanted its original name when the character ceased to be a pictogram (i.e., ceased to suggest object and name together) and became merely a phonetic symbol.—F. A.]

Z, στῆριγξ,[47] 'column,' see *ECG.*, § 12; *SM.*, Figures 17 and 24.

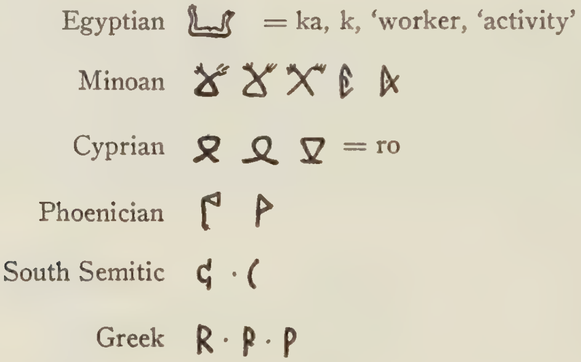

Minoan = ste
Semitic
Greek = zd, dz
Italic = st, ts
Runic = z

L, λαμπάς, 'torch,' *SM.*, Figure 24; Figure 26, line 3; Figure 25, line 4; etc.


Minoan
Phoenician
Greek

Whence the names λάμδα, *lamed*.

R, ῥεκτήρ/ῥοκτήρ, 'worker,' *E.*, 7.


Egyptian = ka, k, 'worker, 'activity'
Minoan
Cyprian = ro
Phoenician
South Semitic
Greek

The similarity of the Minoan to the Egyptian pictograph was pointed out by Evans (*SM.*, p. 240), who also cites certain graffito forms (*SM.*, p. 183), but apparently did not notice the important linear forms (*SM.*, Figures 24 and 33). These suggest the originals of the inverted Cyprian character and the familiar tilted Semitic-Greek forms. It also appears that **R** is not a tailed form of **P** as is usually assumed (Taylor, II, 106), but arose from X much as B developed out of X. Observe also the names *reš* and (with gradation) *roš*, ῥω. [The very archaic South-Semitic form is also exceedingly suggestive. The value *re* which Dr. Hempl assigns to the Minoan character rests upon an interpretation of a clay tag ("P. 85"; read as ἀμφορευς) which he himself considered doubtful. Perhaps *ro* was the original value (cf. *A.*, § 36) and the name *reš* was a Semitic innovation, adopted because it has a meaning.—F. A.]

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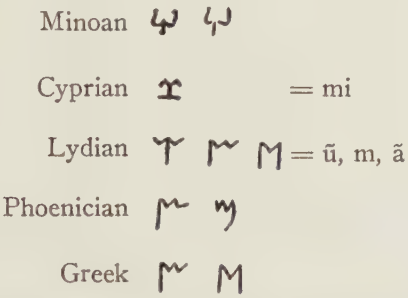
[47] [I do not know why Dr. Hempl chose this word rather than στήλη.—F. A.]

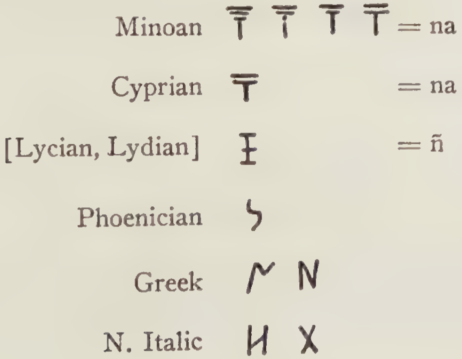
M, μηνίσκος, 'meniscus,' *E.*, 30.



By analogy to the adjoining nasal, N, this letter shifted its stem to the beginning. In Lydian we find all three forms, two of them serving to represent nasal vowels which developed from the terminations *-am* and *-um* as in Latin.

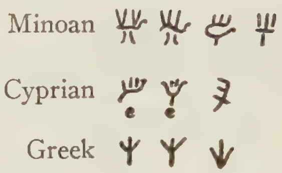
[The word *meniscus* properly means 'crescent.' The pictogram resembles the curving horns worn by the goddess Isis, but I do not know upon what authority Dr. Hempl applies to them the word *meniscus*.—F. A.]

N, ναός, 'temple,' *ECG.*, § 29.



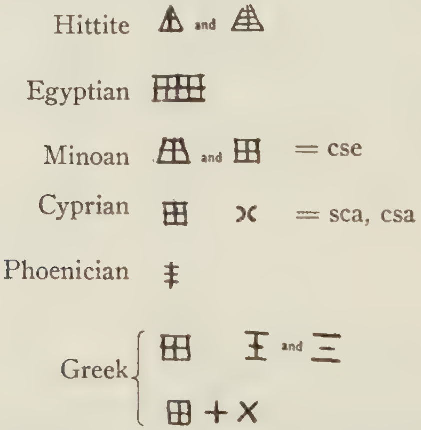
The Minoan character represents the *bethel* or *baetylus,* a sacred pillar in which the god dwelt. [In "Early Cyprian Greek," § 29, Dr. Hempl justifies the name ναός by referring to the Minorcan *nau,* one of many forms of the symbol. This is on the authority of Evans, "Mycenean Tree and Pillar Cults," (*JHS.,* XXI, 98–204). Evans had already perceived the relation of the Cyprian to the Minoan character. The derivation of the Greek form is far less obvious. Perhaps it results from some such series as: T · Y · ᛘ.—F. A.]

Ψ, χείϱ, 'hand,' *ECG.,* §§ 18, 33.



Very common in Minoan linear writing. In script B it seems always to retain the thumb, which, however, is usually lacking in script A. In the Western Greek scripts the character was simplified to Ψ Ѱ with the special function of representing *ch.* [For another criterion by means of which scripts A and B may be readily distinguished, see *E,* above.—F. A.]

⊞, ξένη, 'foreign land,' *ECG.,* § 13.



The character ⊞ appears in various Western Greek alphabets found in Italy. Its use in Etruscan *śupelneξ* (Fabretti 296 ter *b*) = Latin *supellex,* proves that it was there merely a doublet of +. (See *EI.,* No. 17.)

SUPPLEMENTARY LETTERS

51. [The only account of the Supplementary Letters which I found among Dr. Hempl's papers is a brief note, written about 1913 or 1914. He quite certainly modified his views very considerably before 1920. Rather than omit so important a matter altogether, I have reproduced the substance of the note and added some conjectures of my own suggested by Dr. Hempl's general theory and by a most interesting monograph by M. Hammarström, which Dr. Hempl never saw.—F. A.]

52. In early Cretan inscriptions:

T = *t*; ⊕ = *th*
K = *c* and *ch*
Π = *p* and *ph*

In Thera and Melos:

T = *t;* ⊕ and ⊕⊟ = *th*
K = *c;* ϙ⊟ and K⊟ = *ch*
Π = *p;* Π⊟ = *ph*

That is, at first the aspirate stops were not distinguished from pure stops, except in the case of *t* and *th*. Then an *h* was added to ϙ, K, and Π (or even to ⊕) to indicate the aspiration. The sound *cs* was written *kš*; *ps* was written *πš*. The special signs φ, ψ, χ, ξ were not in use.

The origin of these supplementary letters must be brought into relation with the known sound changes of early Greek. The labio-velar *q* (*kw*) when next to a *u* became *k*, but in most other positions became *p;* and under like conditions *qh* became *kh* or *ph*. The possibility that Φ is a modification of ϙ has often been entertained and consorts well with the phonological development of *q*. On Corinthian vases of the sixth century (*IGA*., XX, 69, 71) the form ϙ is used for both values *k* and *ph* (cf. Larfeld, paragraph 237). On an Abu Simbel (Kolophon) inscription (*IGA*., p. 482*e*) and on Rhodian vases of the sixth century (*IGA*., p. 473 = Roberts, § 131*a*) the forms ϙ and Φ are differentiated: ϙ = *k*, Φ = *ph* (cf. Larfeld, page 231 = § 156).

The evolution of the other letters may be schematically represented: starting with Φ = *p* or *k*.

Western Φ⊟ = kh > Ψ⊟ > Ψ > ⩛ = kh
Eastern Φ Σ = ps > ΨΣ > Ψ = ps
⊞Σ or ×Σ (cf. ΦΣ, ⊕⊟) > *ks*

Hence × was mistakenly supposed to have the value *k* or *kh* and used to represent *kh*. In the Western alphabet its original value *cs* was retained.

53. [This is substantially identical with the theory of Szanto, and is open to the same objections. (See Larfeld, paragraphs 158 and 162.) The relation of Φ = *ph* to Ϙ is quite generally accepted. There is considerable epigraphical evidence for the derivation of Ψ = *ps* from ϘΣ (Larfeld, paragraph 162, section 2) but very little for the other hypotheses. The form Ψ = *k, kh* appears to be very ancient. Since open forms of Ϙ (e.g., Y) occur sporadically, it is not impossible that closed and open Φ and Ψ existed side by side and were differentiated, but it is strange that so little definite evidence is available. Indeed one is tempted to believe that all the supplementary letters are older than the Greek inscriptions we possess. The Theran inscriptions, far from illustrating the gradual evolution of new letters, strongly suggest borrowing.—F. A.]

54. [Most of the other types of explanation are equally unconvincing. Larfeld's[48] derivation of χ and ψ from early Semitic-Greek **T** and **Y** would be acceptable only if there were well-authenticated instances of consciously assigning new and different sound-values to variant forms of a letter. In both Lydian and Lycian the bye-forms of the nasal consonant *m* were used as signs for nasal vowels (§ 50, M). But in this case the old value *m* is phonetically very close to the new values assigned (*ẽ, ã,* etc.). To assume that a variant of **T** was used to represent the wholly different sound *ch* is to assume that a new letter was created, and supposes an innovator with the authority of Claudius or Ulfilas. The same objection stands against the suggestion that the Greeks borrowed *samech* and *het* (*cheth*) and deliberately assigned to them the new values *cs* and *ē*. When letters are borrowed their values are borrowed with them, and any theory which assumes a radical change in values is to be eyed askance.—F. A.]

55. [From the Minoan script known as Linear A there developed various syllabic systems: the Cyprian syllabary; perhaps a "Mycenean" syllabary in which were written the mysterious inscriptions found at Mycene and at Troy; and what I shall call the Hellenic syllabary, the direct ancestor of our alphabetic forms.[49] Dr. Hempl has described the steps by which this early type of writing was gradually simplified until alphabetic writing was reached, but at what date and among what peoples this simplification first took place is still unknown to us. The first traces of purely alphabetic writing are found among the Phoenicians, and it is from them that the Greeks learned the alphabetic principle. Yet the extent of their influence seems to have varied. In the so-called "Hellenizing alphabets" (Lydian, Lycian, Carian, Theran) the simplification was not complete, and we find signs unknown to the Phoenicians. The proto-Ionic alphabet, on the other hand, is remarkably similar to the Phoenician. It has adopted the same selection of letters, the same (un-Hellenic) order, and several of the Semitic letter names.—F. A.]

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[48] [Larfeld, par. 238.—F. A.]

[49] [See Petrie, *Formation of the Alphabet,* chapter iii.—F. A.]

56. [Since the Western alphabets have the Phoenician order of letters, it has always been assumed that they stood in the same relation to the Phoenician alphabet that the Eastern does. There are, however, certain reasons for questioning the validity of this assumption.

In the first place there is no proof that the Western letters were called by the familiar Ionic-Semitic names: alpha, beta, gamma, etc. Hammarström,[50] from a study of the grammarians and from an examination of the texts themselves, proved that the earliest[51] deducible Etruscan names were syllabic, and not unlike the letter names employed on the continent today:

A BE CE E VE ZE HA ΘE I KA LE ME NE PE
ŚE QU RE SE TE U ΦE ΨE? FE?

I see no reason for believing that these names were invented by the Etruscans. It is far more probable that they are the original names of the letters of the Western alphabet and reflect the values which the letters had in the Hellenic syllabary. Originally Ψ stood for velar-stop + *e,* that is, either *ke, ge,* or *che;* ϙ stood for *ku, gu, chu, qu;* K stood for *ka, ga, cha.* After the introduction of the alphabetic principle, the vowel was written out, but *K* continued to be used only before *A, Q* only before *V,* and the signs continued to be called *ka, qu, che.* In Etruscan no differentiation of stop signs took place: Ψ still represents either *k, g,* or *ch,* etc. Archaic Latin inscriptions present evidence of similar looseness (VIRCO, LADINOD, ADVOCAPIT, etc.), but the differentiation into voiced, mute, and aspirate signs occurred very early, probably under Greek influence.—F. A.]

57. [That the signs of the Hellenic syllabary actually had recognized and conventional names is indicated by the correspondences between their phonetic value in the original names of pictograms and their ultimate restricted alphabetic value. The old name not only persisted, but likewise determined the function assigned to them. The sign Ψ is a linear degeneration of the pictogram called χεῖϱ, 'hand.' In the syllabary it must have been called *chē* even though it might be used to represent any guttural + e, that is, *ke, ge, che, qe.* It was this name which determined the function which it ultimately got of representing the sound *ch.* If such correspondences were rare they might be ascribed to chance. But the restricted values of Δ, Γ, K, ϙ, were all determined in the same way, the letter in each case being used to represent the initial sound of its own name.[52]—F. A.]

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[50] [*Beiträge zur Geschichte des Etruskischen, Lateinischen, und Griechischen Alphabets.* Helsingfors (1920), pp. 15–34.—F. A.]

[51] [Later on L, M, N, R, (and perhaps *s* and ϝ) were given semivocalic names, that is, were called l̥, ṃ, n̥, r̥ (*op. cit.,* page 22).—F. A.]

58. [The sporadic use of stop-signs with syllabic value (e.g., *bne,* for *bene, krus* for *karus*) may, as Hammarström declares and as the epigraphical evidence indicates, be a secondary phenomenon, relatively late. But the existence of a script which employs the Western alphabetic forms penalphabetically (Venetic) remains to be explained away, and I dare say that future studies will create new embarrassments.—F. A.]

59. [The history of Western alphabets is far more complicated than has hitherto been supposed. Ignoring regional peculiarities, it is still impossible to prove that Phoenician influence was all-pervasive. The alphabetic principle was adopted (rather gradually) because of its great convenience. The Phoenician order of letters was doubtless adopted because its constituted the arithmetical *lingua franca* of the Mediterranean.[53] The imitation of Phoenician usage in other respects was neither clear-cut nor close. The old "Hellenic" letter-names persisted. Here and there exceedingly archaic traits appear, suggesting that the Western alphabet as we know it was, as it were, laid over another system of writing.

It is therefore quite possible that the so-called non-Phoenician signs +, Ψ, Φ were not "inventions" at all, but existed before Phoenician influence made itself felt. The Eastern alphabet is a close imitation which eliminated all letters except those found in the Semitic model. The Western alphabet is a freer imitation, which preserved certain "native" letters. Both Ψ and Φ occur on the oldest inscription written in a Western alphabet—the Lemnos Stone.[54] The letter + is probably quite as old. The only reason for believing that these three signs were at some uncertain date added to the Western alphabet is the argument from analogy. The facts, such as they are, all point the other way. Naturally they had to be placed at the end of the alphabet when the Phoenician order[55] of letters was adopted. This fact proves nothing whatever about their antiquity.—F. A.]

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[52] [The letter H seems to have had the name *he* in the syllabary. With the introduction of the alphabetic principle, it was probably used with a certain looseness to represent the long *ē* either with or without breathing, i.e., *ē* or *hē,* and likewise to represent the breathing alone, *h.* Hence arose the ambiguity which scholars have found so puzzling.—F. A.]

[53] [It is important to note that the order of the last few letters does not have to be uniform. They stood for large numbers which would rarely occur in trading. —F. A.]

[54] [There is no occasion for the use of ξ in this text.—F. A.]

[55] [Notice that the syllabaries in Italy (e.g., the Venetic ones in Pauli, *AIF.,* III, Nos. 7 ff., and on the Caere rattle, Fabretti 2403) have a special order, different from the alphabet. Is this a survival?—F. A.]

60. [From all this, certain rather tentative conclusions may be drawn concerning the presence of the supplementary letters in both alphabets.

I. WESTERN ALPHABET

+ is from ⊞ (cf. § 50, *supra*). Given a pictogram called ξένη it is quite natural that it develop into a consonant with the value *cs*, but it would not be at all natural to devise a special consonant to represent this combination, which is relatively rare. This argues that *cs* is the original value of the sign, and that the sign itself is very old

ᛘ or Y. The antiquity of this sign is proved, first, by its clear derivation from the pictogram (§ 50), second, by the occurrence of ᛘ Y = *k* in Lycian.

Φ is from Ϙ (*vide supra*).—F. A.]

II. EASTERN ALPHABET

61. [ǂ is from ⊞ maintained, perhaps, in some local "Hellenizing" alphabet which has not come down to us. Its form has plainly been influenced by the Semitic *samech,* and in some localities its use as well.

ᛘ = *ps.* Possibly from Φ = *ph* used with Σ. That is ΦΣ, then ΨΣ, then Ψ = *ps.* But such a sign would not have been devised or adopted unless the ξ = *cs* were present to suggest the use of one sign for stop + *s.* The form of the letter was certainly influenced by Western ᛘ, but the two letters had different sources none the less. This theory would be greatly strengthened if it could be shown:

1. That the form Ψ = *ps* (with curved branches) is older than ᛘ = *ps* (with straight branches).
2. That Ψ = *ch* does not occur in Western alphabets until a relatively late date, i.e., that the form with straight branches is the original Western form.

I doubt whether the inscriptions we possess may be made either to prove or to disprove these assumptions.

× = *ch.* Probably from + = *h,* which is found in Carian, Lydian, and Lycian. (See Littmann's *Sardis,* p. 13. Petrie, *Formation of the Alphabet.* Table III records a Carian × = *kh.*) The resemblance to Western + = *cs* means little, since the sign is the commonest letter-form imaginable. That Lydian and Lycian borrowed the letter from the Greek alphabet is, of course, possible; but it is not very probable. Why should the Lycians borrow × = *ch* when they already possessed ᛘ = *ch*?—F. A.]

62. [Our perplexity concerning these letters may, therefore, arise from mere accidental similarity—a similarity which the Greeks themselves noticed and accentuated—between signs which had entirely independent origins.

At all events, this much is clear. Dr. Hempl's researches prove that the Greek alphabet is much older than has hitherto been assumed. We probably do not possess material old enough to illustrate the origin of the supplementary letters, and willy-nilly, must have recourse to schematic and a priori methods of explanation.

One is tempted to believe that in the Greek world writing on stone was not extensively practiced in early times. Naturally, therefore, very little really archaic writing can have been preserved. The clay tags and tablets of Cnossos would have perished if the palace had not burned and thus fired them. The Cyprian letters and the few Mycenean writings we possess certainly point to the use of clay or skins, the letters being composed of discrete strokes instead of having all their parts attached to one another.[56] —F. A.]

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[56] [See Professor Breasted's interesting study, "The Physical Processes of Writing in the Early Orient and Their Relation to the Origin of the Alphabet," *AJSL.*, XXXII, 230–49. A good deal of insight may be acquired by copying inscriptions on bars of the modeling clay used by children, or writing them with a brush.—F. A.]

II. MINOAN SEALS

PRELIMINARY REPORT ON MINOAN GREEK, TOGETHER WITH CONTRIBUTIONS TO THE HISTORY OF THE ORIGIN AND DEVELOPMENT OF THE ALPHABET

FOREWORD

I first succeeded in interpreting early Minoan in the autumn of 1910, and announced the fact on page 198 of my account of the decipherment of the Phaestos Disk ("The Solving of an Ancient Riddle"), and on page 232 of the *Year Book* of the Carnegie Institution (1911). The present preliminary report was first presented at the one hundred and fiftieth meeting of the Stanford Philological Association, February 27, 1914, and was repeated in modified form at the joint session of the American Philological Association and the Archaeological Institute of America, at Haverford College, December 31, 1914.[1] The long delay in issuing it has been due to my continued illness.

Unless otherwise stated the cuts I present of things Minoan are mechanical reproductions of those in Evans's *Scripta Minoa.*

I should say that all statements as to chronology that are made in this report are based on the conclusions of the archaeologists and that I am not personally responsible for them. In fact, I am convinced that the current conceptions of the early chronology of Europe and of the Mediterranean lands are in need of radical reconsideration.

The reader must not look for texts of a literary character or for the revelation of historical facts of immediate interest. The inscriptions on the Minoan seals and clay tags are almost all of a purely business character. Moreover, what I have done in the way of deciphering is really only a beginning . . . . the larger part of the task must fall to other workers, who will have access to the great store of linear texts that Evans promises to publish in the second volume of his *Scripta Minoa.* Among these we may hope to find at least some texts that will throw light upon the history and the character of these the most interesting of the peoples of the shadowy past.

[In preparing this manuscript for publication, I omitted most of the Foreword, and abridged or condensed it elsewhere. Practically all the material which dealt with the history of the alphabet now appears in the preceding paper. Sections 20 ff. were recast on this account.—F. A.]

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[1] Reported by Kent in *Indogermanisches Jahrbuch* (1916), III, 202–4.

II. MINOAN SEALS

1. The Aegean, that wonderful stretch of sea that divides Greece from Asia Minor, or rather joins the two peninsulas, was the cradle of the first great European civilization. Our knowledge of this early epoch may be said to begin with the remarkable discoveries that Schliemann made in the latter part of the last century at Troy and later at Mycenae, Tiryns, and Orchomenos. These discoveries were followed by others at Olympia, Vaphio, and elsewhere, on the islands as well as on the mainland. But no just conception of the heights that human endeavor had already attained in those prehistoric days could be formed until the opening of this century when Evans, Halbherr, Pernier, and others laid bare the ruins of the great Cretan palaces at Cnossos and Phaestos and of the humbler dwelling-places in the towns.

2. Crete, the southern boundary of the Aegean, the great island stepping-stone between Europe, Asia, and Africa, was ideally situated for the early development of a high civilization. It was a fertile country and had a fine climate; it was near enough to foreign lands to be able to profit by their example; and it had the great advantage of insular isolation, an isolation that has done so much to guard England and permit her to have individual development. Like England, too, Minoan Crete found it to her advantage to become mistress of the sea. Her ships were in every harbor and drove the pirates to cover, while her people enjoyed prosperity and security without strong fastnesses and massive city walls. Oversea commerce brought wealth, wealth leisure, and leisure the opportunity for the encouragement of the artistic spirit. Hand in hand with commerce, there developed industrial skill and business method, including writing, which furnished the means of recording legal enactments, sacred injunctions, and the poet's fancies. Not only art, but also architecture, engineering, and plumbing developed in a marvelous way and contributed their share toward making this earliest European civilization remarkably like the civilization of recent times. Among these modern elements such diverse things as naturalistic art and tight lacing, the latter practiced by men as well as by women, together with the sewn, tight-fitting, extremely décolleté gowns[1] of the women, remind us strikingly of modern France.

3. Minoan religion was nature worship which largely had the form of the adoration of the sacred tree and the sacred pillar, or baetylus, in which the divinity was believed to inhere—the bethel, or 'house of God,' upon which Joseph rested his head when he had the strange dream of the ladder reaching up into heaven.[2] Gaea (otherwise Rheia, De-meter, Ma, Cybele), that is, "Mother Earth," was the chief Minoan divinity—"most gracious Gaea, Gaea the bounteous," as she is called in a remarkable distich written by her priestess (*M.*, 21, No. 12). The uranic symbol of Gaea was the dove, which flies over the earth; her chthonic symbol was the serpent, which dwells in the earth. In a mountain cave the Great Goddess gave birth to a son, who in time became identified with his father, Zeus, the god of the sky, but whose earlier form was that of the bull-god,[3] whom the Hittites called Thesippos (Tešup, etc., *H.*, I, 8 n.). Later he was resolved in Crete into the Minotaur and the hero Theseus who slew him, and in Athens into the fire-breathing bull of Marathon and Theseus, the great national hero of Athens, who captured him and sacrificed him to Apollo. Bull-fights and bull-grappling, similar to the sport at a western rodeo, or round-up, but far more varied and dangerous,[4] appears to have been the chief public sport of the Minoans, who were also fond of wrestling and boxing and had a theater, or "theatral area" at each palace. There can be no doubt that the seven youths and seven maidens that Athens was bound to send each year "to be devoured by the Minotaur," represent hostages to be trained as toreadors for the Cretan bull-fights.

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[1] See Lady Evans's article, "Dress," in Whibley's *Companion to Greek Studies* (1905), pp. 523 ff.

4. The question naturally arises: Who were the Minoans, to what race did they belong, and what language did they speak? Hitherto such questions could be considered only in the dim light thrown by archaeological evidence. The present attitude toward them is well reflected in Hogarth's

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[2] "And Jacob awaked out of his sleep, and he said, 'Surely the Lord is in this place; and I knew it not.' And he was afraid, and said, 'How dreadful is this place! This is none other but the house of God, and this is the gate of heaven.' And Jacob rose up early in the morning, and took the stone that he had put for his pillows, and set it up for a pillar, and poured oil upon the top of it. And he called the name of that place Bethel. . . . . And Jacob vowed a vow, saying . . . . 'this stone, which I have set for a pillar, shall be God's house.'" Genesis, xxviii: 16 ff.

[3] This same Hittite bull-god (akin to the Syrian-Assyrian Hadad/Adad and the Damascan-Babylonian Rimmon/Rammon), the great god of the mountains, the god of thunder, lightning, and storm, the god of war, whom the Hebrews learned to know when they absorbed the Hittites of Syria, reappears as the golden calf and the god who was worshipped in the similitude of an ox—the god of the hills, who treadeth upon the high places of the earth, who roars from Zion, who hath his way in the whirlwind, and the storm and the clouds are the dust of his feet, his fury is poured out like fire, and the rocks are broken asunder by him, the god of hosts, the god of the armies of Israel. See Ward, *American Journal of Semitic Languages and Literature* (1909).

[4] Baikie, *The Sea-Kings of Crete*, pp. 88–91.

article in the *Encyclopaedia Britannica* (I, 248 f.), from which I venture to copy the following:

> The important point is this, that throughout the nine Cnossian periods following the Neolithic Age (named by Evans, 'Minoan I. [1, 2, 3], II. [1, 2, 3], III. [1, 2, 3]') there is evidence of a perfectly orderly and continuous evolution in, at any rate, ceramic art. From one stage to another, fabrics, forms, and motives of decoration developed gradually; so that, at the close of a span of more than two thousand years, at the least, the influences of the beginning can still be clearly seen and no trace of violent artistic intrusion can be detected. This fact, by itself, would go far to prove that the civilization continued fundamentally and essentially the same throughout. . . . . We see evidence of a uniform Nature Worship passing through all the normal stages down to theoanthropism in the latest period. There is no appearance of intrusive deities or cult-ideas. We may take it then (and the fact is not disputed even by those who, like Dörpfeld, believe in one thorough racial change, at least, during the Bronze Age), that the Aegean civilization was indigenous [but see *H.*, I, 53, end, and § 6, *infra*], firmly rooted, and strong enough to persist essentially unchanged and dominant in its own geographical area throughout the Neolithic and Bronze Ages. This conclusion can hardly entail less than a belief that, at any rate, the mass of those who possessed this civilization continued racially the same. There are, however, in certain respects at certain periods, evidences of such changes as might be due to the intrusion of small conquering castes, which adopted the superior civilization of the conquered people and became assimilated to the latter. These and other less well-marked changes, say some critics, are signs of a racial convulsion not long after 2000 B.C. An old race was conquered by a new, even if, in matters of civilization, the former capta victorem cepit. . . . . The most that can be said to be capable of proof is the infiltration of some northern influence into Crete at the end of Minoan Period II.; but it probably brought about no change of dynasty and certainly no change in the prevailing race.

5. Upon all these questions the decipherment of the inscriptions will, doubtless, ultimately throw much light. I can already state that the early pictographic seals (which Evans says "had come into existence in Crete at least by the end of . . . . the third millennium, in other words by about 2200 B.C. . . . . or from the point of view of Cretan archaeology . . . . before the close of the Early Minoan Age") were written in Javonian Greek of the Attic type; and that this Javonian Greek persisted until it was more or less displaced by non-Javonian Greek on the first destruction of the palace at Cnossos and the introduction of linear script of Class B. This took place at the end of the Middle Minoan Period, or about 1600 B.C. This form of writing persisted until the final destruction of the palace at the end of the second Late Minoan period, or about 1400 B.C. (*H.*, I, 5 n.). In my forthcoming reports on Hittite I have shown that some Hittites were Javonians of the same type as the early Minoans and Athenians (*H.*, I, 6, 16); that they conquered Medan in Mesopotamia about 1900 B.C. (*OD.*, pp. 187–88); that Doric Hittites were settled in northern Syria, Mesopotamia, and eastern Asia Minor at an early day (*H.*, I, 17), and had set up a Doric dynasty on the Hittite throne at Pteria by about 1400 B.C. (*H.*, I, 12; *OD.*, p. 191).

6. In other words, the Greeks were in Crete and Asia Minor at least one or two thousand years earlier than has been supposed. And there is no reason why they should not have been; for there is no real basis to the generally accepted doctrine that they came down from the north at a comparatively late date. It is true that such anthropological evidence as we can get would appear to show that the Minoans, like Modern Greeks and Italians, possessed the characteristics of the Mediterranean race; while all tradition, as well as many other considerations, makes it necessary for us to assume, in spite of Ridgeway, that the Greeks originally came from the north. There is, however, no contradiction between these two things. All that we have to assume is that at some early day, probably toward the end of the Neolithic Age, say 3000 B.C., enough Greeks made their way to Crete[5] to form the predominating element of the population in parts of the island and give their speech to the resulting amalgamated race. That this race should in the course of time revert to something like the original native type is the teaching of all sound anthropology. That Evans finds no interruption in the continuity of civilization and no evidence of an ethnic break is easily explained if only we admit that the Greeks could have come to Crete early enough. And why should we inflict upon ourselves the superstition that northern man had first to develop far into the Bronze Age before he could learn of the fair lands and mild winters of the south and pluck up courage to make them his own? "It is absurd to suppose that any of the prehistoric societies of this debated region of the Nearer East, so desirable in the eyes of the populations of the deserts, steppes, and forests of three continents, were still unmixed even in neolithic time."[6] We are still in bondage to the idea that there were pure races that maintained their integrity until about the dawn of history, and whatever we have learned to associate with any tribe or tribal complex we assume must have belonged to the embryo community out of which it is supposed to have developed. So we hesitate to recognize the Minoans as Greeks because we do not find them worshipping the Olympic gods or dressed and armed and housed as the Greeks of history were. And yet, if there ever was anything clear in the history of religion, it is the fission generation of Demeter, Artemis, and Aphrodite, of Persephone, Athena, and Hera, out of the mother goddess Gaea/Rheia, who was the chief object of worship in Minoan Crete.

7. So, too, in our conception of the Dorians. They must, forsooth, all have been of like character, all at the same stage of development, and have

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[5] [See now *H.*, I, 48.—F. A.]

[6] Hogarth, *I.* and *E.*, p. 117.

descended upon Greece at one and the same time and in one and the same manner. We admit that Greeks could vary and that they came in different ages and affected differently the communities into which they intruded. And so we shall doubtless find that Dorians came down at different times, sometimes in hosts, sometimes in comparatively small groups, sometimes directly and rapidly and savagely, sometimes in stages, mingling with more civilized peoples on the way, and undergoing modification in character. So we should not be surprised if Dorians took possession of Cnossos at the end of the Middle Minoan period and the new community betrayed little external modification beyond the introduction of a new dialect and a new hand in the royal chancery, while later Dorians brought ruin and desolation.

8. What we now know about Minoan Crete we owe to Sir Arthur Evans more than to anyone else. All who would advance our knowledge of this important era in the development of European man must build upon the material that he has unearthed and put at our disposal. That such advance in our knowledge will here and there result in the correction of his conceptions is inevitable. It is the lot which, in the very nature of things, befalls every pioneer into the realms of the unknown. We speak in terms of general appreciation of the paths he had opened up for us and the difficulties he has removed, and at times we stop specially to admire some particularly brilliant achievement; but to mention every success and praise every accomplishment would be uncalled for, if not tedious. On the other hand, it surely is our duty to direct attention to every error and every mistake in judgment, lest we permit others uselessly to fall into the same. Thus it comes about that he whose initial efforts made all subsequent ones possible seems to become the butt of the criticisms and strictures of his followers. But such correction really betrays no presumption and implies no ungratefulness or forgetfulness of the debt we owe.

9. In *Scripta Minoa* Evans is publishing the Minoan texts. Volume I appeared in 1909, and contains nearly, but not quite, all of the very early texts. These are on (1) stone seals of various forms, (2) clay tags for receptacles containing supplies, and (3) clay inventory bars.

10. Evans divides the Minoan linguistic material into the following groups:

1. Early Pictographic (*SM.*, pp. 130 ff.);
2. Conventionalized Pictographic, or Hieroglyphic—
    - Class A (*SM.*, p. 134)
    - Class B (*SM.*, p. 138), including
        - Graffito Simplifications (*SM.*, p. 144);

3. Linearized Hieroglyphic (*SM.*, p. 12, below, p. 66, above, *JHS.*, XIV, 278, 279);

4. Linear—
    Class A (*SM.*, p. 28)
    Class B (*SM.*, p. 38).

A simpler classification would be:

1. Pictographic (Evans, 1–2),
2. Linear (Evans, 3–4).

11. Evans failed to read the Minoan script, for three reasons:[7]

1. He assumed (*SM.*, p. 134, etc.) that Minoan pictographic writing was wholly or chiefly ideographic, whereas it is acrophonic (*A.*, pp. 18 ff.).

2. He assumed that the character ✚ was an "initial sign" (something like the initial cross in certain medieval texts), whereas it is a *punct* or word-separator. This led him to read many texts in reversed order.

3. In spite of the fact that he at times showed unusual skill in determining the identity of certain pictograms,[8] he was not so happy in the identification of others. Thus he calls the fibula (*M.*, 21, *fibula*), a 'carpenter's plane' (*JHS.*, XIV, 307).

12. The so-called "Early Pictographic" texts Evans regards as written purely ideographically, while in the case of "Conventionalized Pictographic" he admits that some of the signs had phonetic value (*SM.*, p. 134). He adds, however, that "it is not always easy to draw the line of demarcation between the two." I can find no difference between them as far as orthographic principle is concerned. All the texts are acrophonic.

13. In such writing it is not always feasible to represent the exact pronunciation. Thus, it is often difficult or downright impossible to indicate the distinction between sounds like *p* and *b*, *m* and *n*, etc., and the attempt is generally not made at all. Similarly, we today do not distinguish graphically the voiced *th* of *this* from the voiceless *th* of *think*, the voiced *s* (that is, *z*) of *raisin* (old French *raizin*) from the voiceless *s* of *sin*, the velar *n* (that is, ŋ) of *sink* from the dental *n* of *sin*, or the *o* of *home* from the *o* of *come* (which latter really is no *o*-sound at all). In fact, in acrophonic spelling it is at times even necessary to transpose two adjacent sounds, to ignore a sound, or to permit the intrusion of one not wanted. Thus the following would be typical illustrations of English acrophonic spelling:

> *ri(ng)-mar(ble)-ca(ke)-ball* for *remarkable;*
> *pig* or *pick, peak* or *beak,* for *big;*

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[7] [This section I have abridged and slightly altered.—F. A.]

[8] I should cite particularly the 'template' sign, *SM.*, p. 187, and the 'heart-shaped fruit of the silphium,' *SM.*, p. 216.

hand-sun for *handsome;*
In(dian)-cat-ta(ble)-sho(vel)-onion for *incantation;*
cat-log for *catalog; speck-tack-curl* for *spectacle.*

Observe the failure to spell the medial *-a-* of *catalog* and the medial *-n-* of *incantation.* Also the redundant spelling of the last syllable of *incantation,* and the unnecessary *-r-* of *curl.* It should be borne in mind that there was no desire or aim to indicate pronunciation; the writer was satisfied, provided the reader was able to infer what word was meant. We must remember that we are dealing with the very infancy of writing and cannot expect it to meet standards that did not come into existence until many hundreds of years later.

14. Very frequently, in place of a picture of a large or complicated object, only a part is depicted. Thus, an animal (calf, goat, etc.) is often represented by the head; trees and plants (olive tree, white oak, silphium, etc.) by a branch, the fruit, or the flower; an arrow by its head; a trap by one or both jaws; a workman by the two arms crossed (*SM.,* p. 183, No. 7), etc.

15.[9] The peculiarities of Minoan acrophonic writing may best be learned from the study of the inscriptions themselves. Notice, for example:

1. Inaccuracies of spelling
    ϰύον used to spell χου, 1.
    ϰῆλον used to spell γει, 2, 3.
    ϑύρα used to spell δυ, 3*b*.
    δεξιά used to spell τη, 6.
    λαμπάς used to spell λαντα, 13.
2. Failure to spell an unaccented vowel
    ἔρ[φος]-τρά[γος] = ER-TRA = ἔρυϑρα
3. Redundant spelling
    σερπ[ετον] - ἔρφ[ος] - πε[λεκυς]
    SERP - ERP - PE = σέρπη, 7.

This is a case of "overlapping," so frequent in cuneiform writing. Another excellent illustration will be found in inscription No. 5.

16. Minoan seals are of steatite, cornelian, agate, or other stone. They are usually in the form of a longish bead having three (less often, four) oblong sides. In most cases the larger spaces unoccupied by pictograms are filled in by ornamental devices, so-called "fill-in ornaments." One may be uncertain as to these only in the earlier day of his study of the seals. I do not remember differing in judgment with Evans in this matter in more than a very few cases.

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[9] [This section has been rearranged by the editor.—F. A.]

17. These fill-in ornaments are well shown on the following roundish bead-seal. It has two pictograms (eye and trowel) and five ornaments.

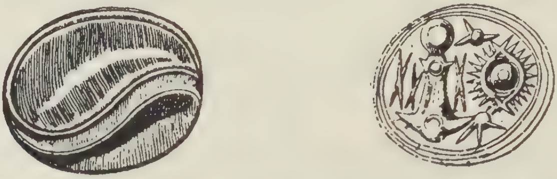


Fig. 1.—Bead-seal with but one engraved side. *SM.*, p. 140, Fig. 82*a* and *b*.

18. A type of seal with but one engraved surface, what Hogarth calls a stamp-seal, reminds one of a familiar form of rubber stamp.

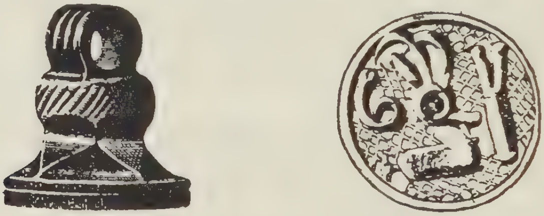


Fig. 2.—Green jasper signet. *SM.*, p. 140.

19. One of the commonest words in the inscriptions is ὄπος, 'juice,' properly 'vegetable juice,' 'sap' (often 'acid juice of the fig-tree,' used as rennet for curdling milk). It was likewise used of the silphium plant, which was evidently one of the most important articles of commerce in the Minoan world. It is associated especially with Cyrene on the coast of Africa just opposite Crete.

Almost equally common is the word γεῖος, 'domestic.' This word, stamped upon the label of a jar or bale, apparently guaranteed that the produce it contained was domestic and consequently exempt from import duty. There actually appears to have been a kind of custom-house situated near the Western Court:

> An important find of clay archives and sealings in the most fully developed hieroglyphic style took place already during the first year's excavations in the West Wing of the Palace. . . . . Immediately behind the landing of the stone steps at the north end of the Long Gallery was an elongated chamber which seems to have been intended for a magazine, but which had been shortly afterwards filled in and used as a platform. This earth filling has preserved a series of clay documents belonging to the first period of this part of the building, and presenting inscriptions in the same "hieroglyphic" or conventionalized pictographic script as that of the more advanced specimens of seal-stones observed from 1893 onwards. The clay documents were in

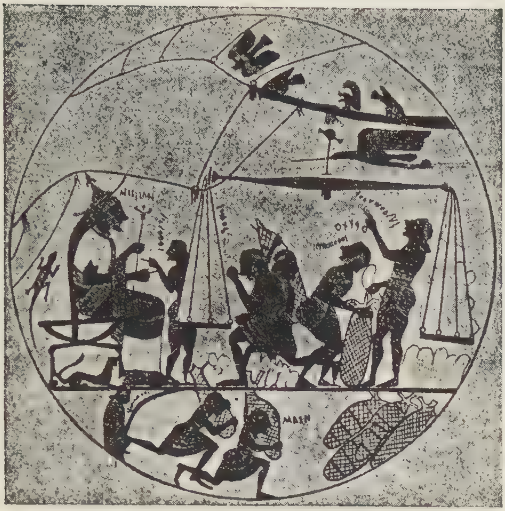


FIG. 3.—King Arcesilaos II of Cyrene superintending the weighing and packing of a shipment of silphium (Forrer's *Reallexikon,* p. 862).

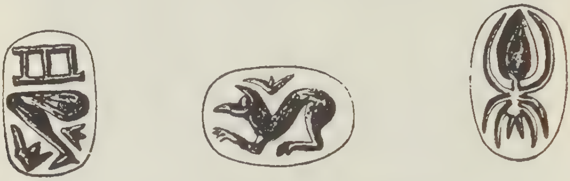
the form of rectangular tablets, short bars with three or four sides, scallop-shaped labels perforated for suspension . . . . and three-sided sealings with a hole running along their major axis for the string by which chests containing the clay archives themselves or other possessions had been originally secured (Evans, *SM.,* pp. 19 f.).

The early work in the second year led up to a further disclosure of the large area of the Western Court of the palace, which seems to have formed the meeting-place between the citizens of Knossos and their royal masters. Here probably all the business between the town and the palace-folk was transacted; stores were brought up, received and paid for by the palace stewards, and passed into the great magazines; and here, perhaps, the ancient Knossian Assembly gathered in council to discuss affairs, as the men of the Greek host gathered in the *Iliad,* while the King sat in state in the Western Portico, presiding over their deliberations. . . . . Whether as market-place or open-air council-room, this West Court must have presented a gay and animated spectacle when the prosperity of the Minoan Empire was at its height (Baikie, *The Sea-Kings of Crete,* pp. 83 f.).

SPECIMEN INTERPRETATIONS

20. [The ensuing paragraphs of this study have been entirely recast. Much of the original material now appears in "The Genesis of European Alphabetic Writing." The rest has been arranged in a new order. So far as possible Dr. Hempl's own words have been retained, but slight deviations have not been expressly noted. Additions by the editor are inclosed in square brackets, as usual.

Abbreviations.—The captions "P. 1," "P. 19," etc., refer to the numbering of the inscriptions in *Scripta Minoa.* In giving the phonetic values of the pictograms the one most frequently found and closest to the *name* of the pictogram is chosen as typical. Its value in the text is usually quite obvious. These phonetic values are explained in the "Index of Pictograms" which follows, § 21.—F. A.]



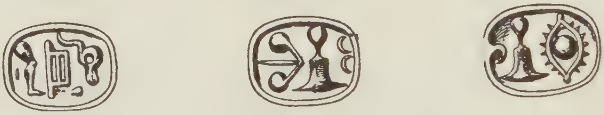
1. = P. 1. *SM.*, pp. 135, 149. Seal

DOOR	LEG	SPIDER	DOG
tu	*pos*	*ar*	*ku*

τυπος ἀρχου

'Seal of the Chief'

The representation of the genitive ending by the υ of κύον suggests that Minoan υ was still the high-back-round vowel (which persisted in later Doric). This genitive ending is usually spelled υ in Minoan, occasionally ου. It is common to Minoan, Doric, Hittite, and the Philistine of the Phaestos disk.



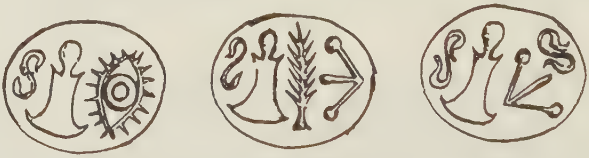
2. = P. 19. *SM.*, p. 152. Seal

HORN	DOOR	LEG	ARROW	TROWEL	EYE	TROWEL
ho	*tu*	*pos*	*ke*	*u*	*op*	*u*

ὁ τυπος γειου ὁπου

'The stamp of domestic *opos*'

The definite article, ὁ, which appears frequently on the Phaestos disk is rarely found on the Minoan seals.



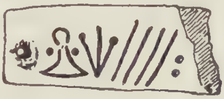
3. = P. 46. *SM.*, p. 158. Prism seal

ARROW	TROWEL	ARROW	SHOOT	TROWEL	EYE	TROWEL
ke	*u*	*ke*	*e*	*u*	*op*	*u*

γειου γειου ὁπου

'Stamp of domestic *opos*'

The word τύπος is understood. This seal furnishes two excellent illustrations of redundant writing (§ 15, *supra*). In the first place the word γειου is written twice, with slightly variant spelling. In the second place, the spelling *ke-e-u* repeats in *e* the *ei* (ει) already spelled by *ke*. This more careful spelling has the advantage of making it clear that *u* does not nullify the vowel of *ke*, i.e., that we have γειου and not γου. Another way of indicating that a vocalic sign does not nullify the vowel of a preceding syllable is by the use of dots inclosing the second of the characters, illustrated by the two following inscriptions:

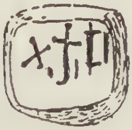


3*a*. = P. 109*c*. *SM*., p. 174. Clay bar

:////	ARROW	TROWEL
υκ′	*ke*	*u*

υκ′ γείου

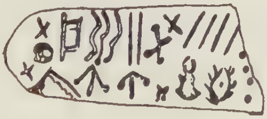
'420 measures of domestic [produce]'



3*b*. = P. 110*e*. *SM*., p. 175. Clay bar

DOOR	ANKH	×
tu	*a*	= δυα

'Two,' with the inflection of a neuter plural *nom./accus.* corresponding to dialectal genitive δυῶν and datives δυοῖσι, δυσί.

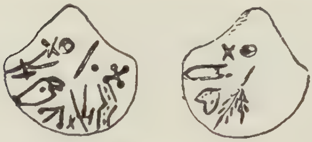


4. = P. 104*b*. *SM*., p. 172. Clay bar

EYE	TROWEL	ARROW	ARROW	TRAP
op	*u*	*ke*	*ke*	*u*

ὀποῦ γεγείου, 'of domestic *opos*'

[The adjective γέγειος occurs in Hecataeus.—F.A.]



5. = P. 93. *SM.*, p. 169. Pectinoid clay tag

OLIVE-TREE	OPOS	SNAIL
elaio	*opo*	*poma*

|o	ROADS	BANKS	PLOW	ARROW	GOAT	PLOW
	ei	*eiona*	*a*	*ke*	*tra*	*a*

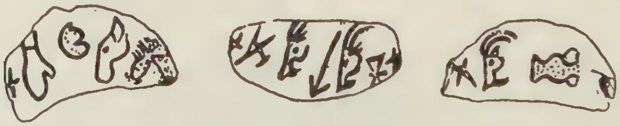
ἐλα(ι)α-πωμα ϱι′ ἠιονα κέδϱα

‘olive oil. 110 bank cedar cones’

There is a ✚ (punct) after each word and one between the two members of the compound. Observe the redundant spelling of the π of πωμα and of the ηι of ἠιονα. The double spelling of the final -α of κέδϱα is intended to indicate the length of the vowel, this neuter-plural ending having been originally identical with the feminine singular of the *a*-stems.

The first word is literally ‘olive-oil drink,’ but I cannot believe this to be the correct interpretation. It has occurred to me that we may have to do with fine olive-oil for table use and that the word πωμα is used because oil is a liquid.

‘Bank-cedar cones,’ that is, cones of cedars growing near the water as contrasted with rock-cedar. The form of the first member of this compound corresponds with that of κυνα in κυνάμια, that is, *n̥* regularly > *a* and the unsyllabic *n* of forms like κυνός, ἠιόνος, intruded by analogy. (Cf. Brugmann, Vol. II, Part 1, p. 84.) Such words as ἠιονα-κεδϱα and πετϱα-κεδϱα are not grammatically connected with the rest of the inscription, but merely give the flavor. In later times the resin as well as the cone of cedars was employed for flavoring.



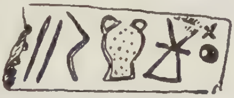
6. = P. 76. *SM.*, p. 165. Three-sided clay label

JAR	GOAT	BEE	CALF	OPOS	RIGHT-HAND	
er	*tra*	*meli*	*por*	*o*	*te*	= ἔϱυθϱα [μελιφόϱτη]
DOUBLE-AX	GOAT	ARROW	GOAT	PLOW	= πέτϱα-κέδϱα	
Pe	*tra*	*ke*	*tra*	*a*		

‘Red, [sweetened with honey.] Rock-cedar cones’

The text reads from right to left on all three sides. There is a ✚ after each word, the second being repeated at the beginning of the third side.

[Dr. Hempl was unable to find a satisfactory interpretation of the second word. The one I have suggested does not occur in any known text. The word also occurs in P. 51*a*: BEE CALF RIGHT-HAND ACORNS, as though a genitive μελιφορτῆς. P. 51*b*: SWAN(?) MALLET ARROW is then the word on which this genitive depends. One might read this as κερακή, ‘a mixture,’ ‘claret,’ from an adjective κερακός. This assumed form is really not too far-fetched, for it recalls the Homeric μελίκρητον (*Odyssey,* X, 519; XI, 27). Cf. also BEE SAFFRON on P. 86*b* = *meli-kro* = μελιχρός(?), ‘honeyed.’ The feminines μελιφόρτη and κερακή are explained by the fact that the commonest word for wine in Minoan was feminine (see the following inscriptions).—F. A.]



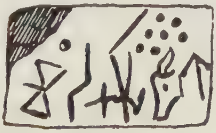
7. = P. 109*a*. *SM*., p. 174. Part of clay bar

SERPENT	JAR	DOUBLE-AX
serp	*erp*	*pe*

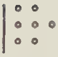
σέρπη or ἕρπη

‘wine’

Σέρπη is a doublet of ἕρπις, which is said to be the Egyptian word for ‘wine’ but is evidently of Greek, probably of Minoan, origin, having reference to the creeping vine. As both ἕρπετον and ἕρπη reflect older forms with initial σ-, we cannot be sure whether we should write them *h*- or *s*-. The addition of the jar, ἕρφος would make σερπ- more likely than ἑρπ-. Compare also σίραπη below, No. 9.

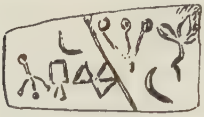


8. = P. 108*a*. *SM*., p. 174. Part of clay bar

	ARROW	GOAT	PLOW	SERPENT	DOUBLE-AX
	ke	*tra*	*a*	*serp*	*pe*
ρο'		κέδρα		σέρπη	

‘170 cedar cones. Wine’

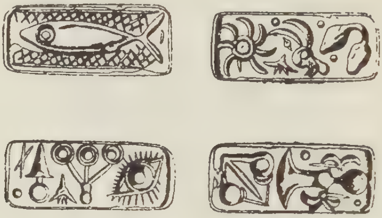
Compare οἶνος κέδρινος, ‘wine flavored with cedar cones.’



9. = P. 110*a*. *SM.*, p. 175. Part of broken bar

(SILPHIUM MALLET DOUBLE-AX
α′ *si* *ra* *pe* = α′ σιραπη
'one (measure of) wine'

Here the use of the SILPHIUM in the spelling makes it clear that the initial σ- had not yet become *h*-.



10. = P. 28. Four-sided bead seal

FISH RATCHET-WHEEL GOAT ACORNS
opson *pa* *tra* *as* = ὄψον πατρας
'Market of the state'

EYE SILPHIUM DAGGER ARROW TROWEL
op *si* *s* *ke* *u* = ὄψις γείου
'Stamp of domestic (product)'

This use of ὄψον for both 'fish' and 'market' was thus common to the Athenians and the Minoans. That the word got these secondary meanings is more easily understood if we assume that the changes took place after the Greeks had been settled for some time in the South. It establishes a close bond between the Athenians and the Minoans, far closer, indeed, than the fact that both peoples spoke Ra-Javonian. Compare also the common relation of Hittite and Minoan Javonians to Theseus (§ 3, *supra*).

The use of the pictogram of a word to spell the word in another sense is not ideographic writing, πάτρας, genitive of πάτρα, 'country,' = πατρίς, ὄψις, 'appearance,' 'visual impression or image,' 'sight'; here the idea 'image' in general has developed into the specific idea of the 'image or device on a seal,' hence 'seal' or 'stamp.'[10]

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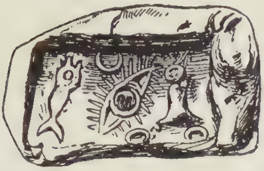
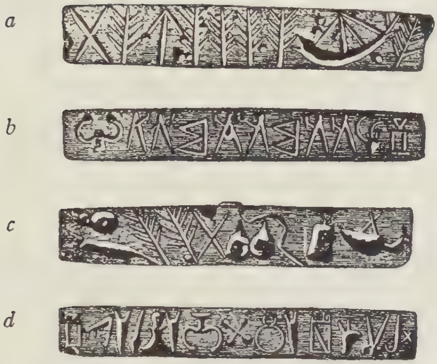
[10] This would seem to support the derivation of Latin *signum* 'image,' 'portrait,' 'seal,' from $\sqrt{seq}$, 'see' (Fay, *AJP.*, XXVII, 315).



11. = P. 45. *SM.*, p. 157. Sealing

FISH EYE TROWEL
opson *op* *u* = ὄψον ὀποῦ
'*opos* market'



12. = P. 26. Four-sided bead seal, white steatite

This inscription is unusually well written. The acrophonic writing is of the overlapping type; that is, in nearly every case the initial of the name of a new character repeats the last sound or sounds of that part of the name of the preceding character which is used in spelling (§ 15, *supra*). This overlapping feature is, of course, of great assistance in deciphering. The text is in the form of a distich. A large punct (X) stands at the beginning, another between the two verses, another at the end. The word-separator consists of two minute crosses, one above the other. These escaped Evans, and do not appear in his cut (*SM.*, p. 154). The text runs as follows: in the cut (*SM.*, p. 154) *a*→, *b*←, *c*→, *d*←; in the heliotype (Plate II), *a*←, *b*→, *c*→, *d*←.

(*a*) × SHOOT ARROW SHOOT SHOOT SHOOT ⸭
e *ke* *e* *e* *e* = ἔκηε, 'lighted'

SHOOT SHIP SHOOT ⸭
e *naus* *e* = ἔναυσε, 'kindled'

(*b*) MALLET GOAT PLOW PLOW ⸭
raist *tra* *a* *a* = ῥαίστ(ε)ϱα, 'most gracious'

LAND PLOW PLOW ⧖ LAND PLOW PLOW ⧖
gaia a a = *gaia a a* = Γαία Γαία

MENISCUS (*c*) NOTOPHORES PORTRAIT SHOOT SHOOT ×
me no eike e e = μενοεικὴ,
[‘bountiful’

BREASTS SERPENT WEIGHT ⧖
madz ser rop = μαζηρόμ, ‘sacrificial barley-cake’

BIRD (*d*) MALLET ⧖ TRAP SNAIL ⧖
po rai hu po = πυραῖ ὕπο, ‘on the altar’

SPEAR TROWEL SNAIL MENISCUS ⧖
mel up pom mene = μελυπομένη, ‘chantress’

ROADS SIEVE SNAIL ⧖
ei ipo pom = εἶπομ, ‘recited’

ROOF GOAT PLOW HOOK PLOW ×
melatr tra a a a = μελετ(η)ρά, ‘services’

"Εκηε ἔγαυσε ῥαίστρα Γαία, Γαία μενοεικὴ·
μαζηρὸμ πυραῖ ὕπο μελυπομένη εἶπομ μελετηρά.

‘Lo, the most gracious Gaea, Gaea the bountiful kindled the sacrificial barley-cake on the altar; I the chantress recited the services.’

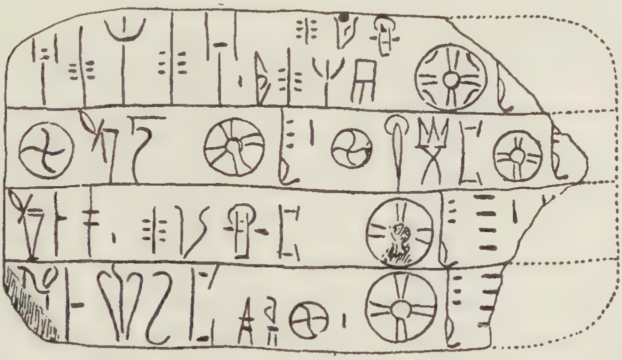
1. ἔκηε, aorist of καίω, ‘light, kindle.’
   ἔναυσε, aorist of ἐναύω (same meaning). This use of two conjoint words of practically identical meaning is a phenomenon akin to reduplication. Brugmann (Vol. II, Part I, p. 61) terms such pairs “copulative compounds.”
2. ῥαίστρα is the feminine of ῥαίστερος, a comparative of ῥᾳ, like ῥᾳδιος, ‘easy,’ ‘obliging’ (compare English “easy” = ‘readily persuaded’), with the ending -ιστερος. But this comparative is here used as an absolute superlative, with the force of ‘very gracious,’ as is also the Doric Hittite ϝαλκιστερος (*H.*, 2). The original meaning of ῥᾳ was ‘light’ (that is, German *leicht* in the sense of ‘easily lifted,’ ‘not heavy’).
3. μενοεικὴ for Attic μενοεικής shows that in Minoan this adjective was inflected like ἀγαθός. Γαία is the Minoan form corresponding to epic Γαῖα. The meter demands long *ā*. For the Ra-Javonian character of the text compare ῥαίστερα with μενοεικὴ.
4. μαζηρόμ rather than the later μαζηρόν is indicated by the use of ῥοπή to spell the final syllable. The letter π furnishes an approximate spelling for β, φ, or μ, but not for ν. The use of πωματίας to spell the final syllable of εἶπομ below agrees with this, although in this latter case the *m* might be a loose spelling for *n*. The adjective is

recorded by Pollux in μαζηρὸς πίναξ, 'a plate of barley-cakes.' We here have μαζηρόμ = μαζηρὸν θῦμα, 'sacrifice consisting of barley-cakes.' For the adjective termination, compare μελετηρά below, and see Brugmann, Vol. II, Part I, pp. 358–59.

5. πηραῖ ὕπο. For ὕπο with the locative and meaning 'on,' compare Sanskrit *úpa* and old Bulgarian *upa* with the locative and the same meaning.
6. μελυπομένη. The earlier form of Μελπομένη. The υ (from weak ϝε) in the Minoan form betrays the etymology of μέλπω, 'sing,' which ought not to have remained obscure as long as it has.

*μελυπω < *μελ-ϝεπω, 'speak or utter songs,' from μέλος, 'song,' and *ϝέπω < *ϝε*q*ω, whence the later aorist εἶπομ below.

7. εἶπομ. Earlier form of εἶπον, 'spoke,' 'recited.' It may represent either (1) ε̄πομ (corresponding to the uncontracted Homeric ἔειπον < *ε-ϝειπομ < *ε-ϝευπομ < *ε-ϝε-*q*ομ (for the teleterosis ϝεϝ > ϝει, see Hirt, *Handbuch,* p. 247), or (2) εἶπομ < *ϝεῖπομ, the unaugmented *ϝε-ϝ*q*ομ (see Hirt, paragraph 896). We must recognize that Minoan, like Attic, early lost ϝ and that it favored contraction of neighboring vowels.
8. μελετηρά, 'exercises,' 'services,' 'ritual.' Substantival use of the neuter plural of the adjective μελετηρός, 'practicing,' compare συνουσίαι μελετηραί, 'debating societies.' The development of meaning corresponds to that seen in our 'exercises' and in German (*geistliche*) *Übungen.*



13. = *SM.*, p. 47, 1. 3. Clay tablet illustrating linear script B

MIXING-VESSEL RIGHT-HAND COLUMN SHOOT
kra *te* *ste* *e* = κρατεστη

FIBULA STUD YARD
enete *e* *ke* = ἐνετη-*q*ε

WHEEL TORCH ≣
ta *lampas* 41 = ταλαντα μα'

'Very strong imported, 41 talents'

ϰρατεστη, 'very strong,' feminine of ϰρατετος, an old superlative (Hirt, 2d edition, p. 416, *A.* 2), cf. ϰρατύς, ϰραταιός, ϰρατερος, etc. I do not know whether we should hear read ϰρατεστη as pictographically spelled, or regard the spelling as inexact for ϰρατιστη. (See *ECG.*, § 16 and n. 28.)

ἐνετη, 'imported,' literally, 'sent in.'

*q*ε, 'and,' later τε. (See *ECG.*, §§ 8, 18, 21, 22, 24.)

INDEX TO THE PICTOGRAMS

21. [The following index contains the pictograms occurring in the texts which precede it, together with a few others, chiefly those discussed in *ECG*.

The references preceded by a capital *E*, as "*E*. 122," are to Evans' "Catalogue of Hieroglyphic Signs," *SM.*, pp. 181 ff.

The numbers after the phonetic values of the pictograms refer to the "Specimen Interpretations" above.

A good deal of additional information will be found in the "Table Illustrating the Derivation of Alphabetic Form," *A.*, 50.—F.A.]

ACORNS	ἄσπρις, *E.*, 122. The acorns here stand for the whole tree, cf. § 14. Evans was reminded of the Egyptian hieroglyph for 'kidney.' Value: *as*, 10, and note to 6.
ANKH	*E.*, 33–35. *ECG.*, § 25. Spells *a* in 3*b*.
ARROW	ϰῆλον, *E.*, 13. Spells *kē*, 12*a*; *ke*, 8; *gei*, *ge*, 2, 3, 3*a*, 4, 10.
BANKS	(of a stream) ἠιόνες, *E.*, 115. Spells *ēion*, 5.
BEE	[μέλισσα, *E.*, 86. Dr. Hempl assigned to this pictogram the value νυμφή, but marked the passage in his manuscript as doubtful, probably because the interpretations based on this reading are strained and improbable. The only likely alternative is the word μέλισσα, which was incidentally the name of a Cretan goddess who fed the infant Zeus with honey (Dussaud, *Les Civilisations préhelléniques*, p. 247). "M. A. J. Reinach considère comme des abeilles, et non des papillons, les insectes figurés en grand nombre sur les rondelles d'or sorties des tombes de l'acropole de Mycènes. Il rappelle l'association de l'abeille et de la chèvre sur les monnaies d'Ephèse, correspondant à l'union de Mélissa et d'Amalthée en Crète" (*loc. cit.*). Evans has identified the Dictaean libation table with this cult (*SM.*, pp. 14–15). It is perhaps worth noting that the priestesses of

	Demeter were called μέλισσαι (*Oxyrynchus Papyri*, XV, pp. 160 ff., "Glossary" fragment 3, lines 29–35) —F. A.] Spells *meli*, 6.
BIRD	ποτανός, *E.*, 80. Spells *pu*, 12*c*.
BREASTS	μαζοί, *E.*, 4. Spells *madz*, 12*c*.
CALF	πόρτις, *E.*, 64. Spells *por*, 6.
CHILD	παίς, *E.*, 2. Cf. *ECG.*, § 11.
COLUMN	στῆριγξ, *SM.*, Fig. 24. *ECG.*, § 12. Spells *ste*, 13.
DAGGER	σφασγανον/φασγανον, *E.*, 15. Evans says: "It is a noteworthy fact that the sword, which is typologically an outgrowth of the dagger, is not found in the Cretan hieroglyphic series. It occurs, however, as an ideograph in the Linear Class B, ... an evidence of a later date." One pictogram makes it clear just what (at least in early days) was the form of the σφασγανον, usually translated 'sword,' just as the Phaestos disk shows us the form of the μάχαιρα. Indeed the various forms of Greek pictographic writing furnish us with an exceedingly interesting and useful illustrated vocabulary. For the loss of the initial σ- by teleterosis (*'ferndissimilation'*) compare Modern Greek παστρικός from earlier σπαστρικός. (Hirt, *Handbuch*, 2d edition, p. 247; Brugmann, Vol. I, p. 556.) For σφασγανον < σφαγ-*sk*-, cf. *σφαγ-*yō* > σφαζω, *πελαγ-*scos* > πελασγος (Hirt, *op. cit.*, p. 242). Spells *s*, 10.
DOG	κύων, *E.*, 71. Spells *chu* or *chou*, 1.
DOOR	θύρα, *E.*, 44. The form is the original of Cyprian , *tu*, the two perpendicular lines having fallen, as it were. Spells *tu*, 1, 2; *du*, 3*b*.
DOUBLE-AX	πέλεκυς, *E.*, 36. [A sacred sign among the Minoans and doubtless long an emblem of good augury among other peoples.[11] It is found on vase-paintings of the rude Dorian period; (see, for instance, the dipylon vase in Whibley's *Companion to Greek Studies*, Fig. 87, and the *lebes* from Thebes, *ibid.*, Fig. 88.) It is found on the head of a statue of Cybele found at Mycene (Wace, *JHS.*, XLI, p. 264). It even oc-

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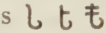
[11] [Much more information may now be got from an article by Margaret C. Waites, "The Deities of the Double Axe," *AJA.*, XXVII, 24–26.—F. A.]

	curs scratched on an Etruscan tile (Fabretti 2658 *bis.*)—F. A.]. Spells *pe,* 6, 7, 9.
EYE	ὀφθαλμός, *E.,* 5. Spells *op,* 2, 3, 4, 10, 11.
FIBULA	(περονη) ἐνετή, *SM.,* p. 47. Spells *enetē,* 13.
FISH	ὄψον, *E.,* 59. Spells *opson,* 10, 11.
FOREIGN COUNTRY	ξένη, *E.,* 114. A special Minoan use of the district sign. See *A.*
GOAT	τράγος, *E.,* 65. This pictogram is particularly frequent in Hittite pictographic writing. Spells *tra,* 6, 10, 12*d; dra,* 6, 8; *thra,* 6; *tera,* 12*b.*
GRANARY	σιτοδόκη or σιτοβολῶν, *ECG.,* § 19. Spells *si.*
HAND	χείρ, *ECG.,* §§ 18, 33. Spells *chei, ke,* etc.
HOOK	ἄγκιστρον, *E.,* 32. It occurs frequently on *graffito* bars as a spelling for *a* in place of the more usual ἄροτρον. For the identity of the forms  compare *P.* 111*b,* and *P.* 112*c.* Spells *a,* 12*d.*
HORN	ὅπλον, ὅπλη, *E.,* 62. The word meant 'tool,' 'weapon,' 'means of defense,' and was also applied to the horns and hoofs of animals. Spells *ho,* 2.
JAR	ἔρφος, *E.,* 50. Spells *er,* 6; *erp,* 7.
KNEE	γόνυ, *ECG.,* § 28. Spells *ko.*
LAND	γαία, γῆ, *E.,* 114. [But the triangle or 'single mountain' also had the value δῆμος, 'country.' See *A.,* 50, above, and Hempl, *TB.,* §§ 50 ff.—F. A.] Spells *gaia,* 12*b.*
LEG	πος, *E.,* 11. There is no means of determining whether the word is πος as in τρίπος, etc., or πως, as in Doric, or πούς, as in Attic; see Brugmann, *Berichte der Sächsischen Gesellschaft der Wissenschaften* (1897), pp. 188 ff. Spells *pos,* 1, 2.
MALLET	ῥαιστηρ, *E.,* 24; usually translated 'hammer.' The identity of the object was recognized by Evans. Spells *ra,* 9; *rai,* 12*d; raist,* 12*b.*
MASON'S PICK	τύκος, *E.,* 21. *ECG.,* § 16. Spells *tu.*
MENISCUS	μήνη or μηνίσκος, *E.,* 30. Spells *menē,* 12*d; men,* 12*b.*
MIXING-VESSEL	κρατήρ, cf. *SM.,* pp. 29, 35, 52, with stirrer; *SM.,* pp. 35, 47, 49, without base; *SM.,* p. 118, Fig. 52*a* and *b,* the object which Evans called "a single sign like a V, with a square handle." Spells *kra,* 13.

MOON	μηνή, *SM.*, p. 118, Fig. 52, where it was overlooked by Evans.
NOTOPHORUS	νωτοφόρος, *E.*, p. 96. Found here only, apparently. In the cut, *SM.*, p. 154, it looks like a rat nibbling at three nuts. In the cut, *SM.*, pp. 217 and 233, No. 96, it resembles a peculiar kind of cucumber with three strange little nubbins on the end. "Apparently a gourd or pod" (Evans). But in the heliotype plate it appears to be a beetle or small reptile carrying on its back a sack of eggs, the νωτοφόρος, 'burden bearer,' also called νοτάες, νωτευς, νωτηνος, νωταγωγος. Spells *no*, 12*c*.
OLIVE TREE	ἐλαι[ϝ]α, *E.*, 101. Attic ἐλάα. Spells *elai*, 5.
OPOS-FRUIT	ὀπός, *E.*, 93. Evans' suggestion that this mysterious-looking object is the fruit of the opus or silphium plant is thoroughly convincing. But the dots probably do not represent seeds. Such dots are used in many Minoan pictograms, apparently always to represent liquid or juice: STREAM, JAR, *E.*, 50, in the abdomen of the BEE, No. 86, and in the petals of flowers, No. 88. It should, however, be remarked that the dots do not appear in vessels whose shape shows that they were used for pouring liquids, Nos. 47–49. I am not yet sure of the identity of the dotted triangular object, No. 51, which resembles a strainer. Spells *o*(*p*), *5*; *o*, 6.
OX	βοῦς, *E.*, *ECG.*, §§ 9, 24. Spells *bo*.
PLOW	ἄροτρον, *E.*, 27. See also HOOK. [Cf. *A.*, S. F. Gow, "The Ancient Plough," *JHS.*, XXXIV, 249.] Spells *a*, 8, 12*b*, 12*d*.
PORTRAIT	εἰκῶν, *E.*, 3. Rare. Not recognized by Evans. Spells *eike*, 12*c*.
RATCHET-WHEEL	πάγη, *E.*, 108. See also P. 23*c*, *SM.*, p. 153, No. 23, where the more exact drawing makes the character of the object recognizable beyond doubt. Evans calls this pictogram a "day-star" or "sun with revolving rings." Spells *pa*, 10.
RIGHT-HAND	δεξιά, *E.*, 9; with the fingers together and the thumb projecting (as in shaking hands, on making a bargain or other agreement, or in taking oath; compare δεξιά = 'assurance,' 'pledge,' 'treaty'). It looks like

	a hand in a mitten, with the thumb extended. In many of the linear forms, the thumb extends to right, suggesting a left hand. But the use of the character had doubtless become stereotyped so that such a detail would pass unnoticed. Spells *tē, te,* 6, 13.
ROADS	ἤιαι, *E.*, 112. Evans regards this pictogram as a *"cross pommée,"* and associates it with the swastika and the cross as a religious symbol and as a star sign. A small circle with inclosed cross (representing intersecting streets) is the Egyptian pictogram for 'town.' In the Minoan character + the dots probably represent towns connected by the roads. The neutral plural ἤϊα, *'viaticum,'* is almost certainly a reflex of an older word, feminine singular, ἤϊα = *via.* Spells *ēi,* 12*d.*
ROOF	μέλαθρον, *E.*, 41. Spells *mele*(*tr*), 12*d.*
SAW	πρίων, *E.*, 23. Spells περί in P. 27, which is not interpreted here.
SERPENT	σέρπετον, *E.*, 84. Literally, 'creeper.' Spells *ser,* 12*c; serp,* 7, 8.
SIEVE	ἶπος, *E.*, 54. Spells *ipo,* 12*d.*
SILPHIUM	σίλφιον, *E.*, 92. [The pictogram is supposed to represent a plant which is now extinct but was in early times an important article of commerce (see Fig. 3, § 19). Evans, who identified it, compares it to very similar representations on coins of Cyrene. Cf. likewise the pictogram OPOS.—F. A.] Spells *si,* 9, 10.
SHIP	ναῦς, νεῶς, *E.*, 57. Spells *naus,* 12*a.*
SHOOT	ἔρνος, *E.*, 97. Described by Evans as a "tree with ascending branches." Spells *ē,* 12*a,* 12*c,* 13.
SNAIL	πωματίας, *E.*, 60. *Helix pomatia.* Evans took it for "the small eatable sepia or Kalamari of the Mediterranean (French *calmar*)." Spells *pōma,* 5; *pom,* 12*d; po,* 12*d.*
SNAKE	σίκτα (lit., 'hisser'), *E.*, 84. For the name see *A.*, 36.
SPEAR	μελία, *E.*, 14. Spells *mel,* 12*d.*
SPIDER	ἀράχνη, *E.*, 85. Spells *ar*(*ch*), 1.
STUD	ἧλος, *E.*, 26. Cf. *SM.*, Fig. 24, line 3, No. 6, from left. Spells *ē,* 13.
SWAN	χήν, *E.*, 81. Spells *kē?* See 6, note.

TEMPLE	ναός, *ECG.*, § 29. Spells *na.*
TORCH	λαμπάς, *SM.*, Fig. 24; Fig. 26, line 3. Spells *lanta,* 13.
TRAP	ὕσπληγξ, *E.*, 99. First taken by Evans to be deer-horns, later "a forked branch or double spray with foliation only on one side" (*SM.*, p. 218). Instead we have a crude representation of the jaws of a trap which here stand for the whole trap. Spells *ou* or *u,* 4; *hu,* 12*d.*
TROWEL	ὑπαγωγεύς, *E.*, 18. See also TRAP. The Minoan trowel had the shape of a whisk broom and was used to spread mortar, to draw it along (ὕπαγω) over the stones. Spells *ou* or *ū,* 3, 3*a*, 4, 10, 11; *up,* 12*d.*
WEIGHT	ῥοπή, *E.*, 25. 'Inclination downward,' 'momentum,' hence 'weight.' I do not believe there is any record of the use of this word in the concrete sense of 'a weight.' Spells *rop,* 12*c.*
WHEEL	τ[α]ϱοχός, *SM.*, Fig. 24. Spells *ta,* 13.
WORKER	ῥέκτωϱ, *E.*, 7. Spells *re.* See *A.*, 50, R.
YARD	κῆπος, *SM.*, Fig. 24, line 3, No. 7. [Is this Evans's number 129?—F. A.] Spells *qe,* 13.
YOKE	λέπαδνον, *ECG.*, § 30. Spells *le.*

NUMERALS

|) The twig or finger (straight or curved) represents 'one.' The larger stick | / (often slanting) represents 100. The pebble (o) represents 10. The lozenge ◇ represents 1,000. In parts of India it is still customary to lay down a twig for each unit, and when ten have accumulated, to replace them by a pebble. The pebble was used in other southern systems and, spreading to the far north, is found in Runic. In Minoan and other systems the stick is often replaced by a circle, probably standing for a stone that was substituted for ten pebbles.

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Mediterranean Studies

III. Three Papers on the History and Language of the Hittites

By

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EDITOR'S PREFACE

I regret that I have been unable to follow the progress of Hittite scholarship during the ten years which have passed since Dr. Hempl composed the following studies, because what little I have seen of the results has appeared to me to confirm his theory that Hittite is Greek mangled almost past recognition by being written in an alien and deplorably slipshod system. Possibly a careful study of proper names (whose true form may be checked from other sources) will eventually show whether or not Dr. Hempl was correct in assuming that the cuneiform merely adumbrates, instead of represents, the Hittite sounds.

I have done very little to Dr. Hempl's original version beyond combing out repetitions. This is perhaps unfortunate, since by rearranging the contents somewhat and adding a few paragraphs I think I might have given prominence to the more convincing passages. Let the reader remember that the second paper deals with Hittite words whose meaning is known, or partly known, from paraphrases in Sumerian and Assyrian. He will do well to begin his reading of the studies with paragraph B3 (page 44 [140]).

FREDERICK ANDERSON

STANFORD UNIVERSITY
February 1931

TABLE OF CONTENTS

PAGE
GENERAL LIST OF ABBREVIATIONS AND WORKS CONSULTED . . 6

A. THE PREHISTORIC WANDERINGS OF THE HITTITE GREEKS . . 9

B. HITTITE DORIC, WITH SPECIAL REFERENCE TO THE TRILINGUAL GLOSSARY 41
  Foreword 41
  Abbreviations 41

C. CUNEIFORM HITTITE 57
  Editorial Note 57
  The Letter of King Amenophis III of Egypt to King Tarcondorous of Arsama 57
    Cuneiform Writing
    Transcription of the Cuneiform Text; Translation; Commentary
  The Song of Lappaios 82
    Meter
    Text; Translation
  Word List 88

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MEDITERRANEAN STUDIES

III. THREE PAPERS ON THE HISTORY AND LANGUAGE OF THE HITTITES

EDITOR'S NOTE

[References to the three papers on Hittite are given by using A, B, C, followed by boldface Arabic numerals indicating the sections.—F. A.]

MEDITERRANEAN STUDIES

III. THREE PAPERS ON THE HISTORY AND LANGUAGE OF THE HITTITES

A. THE PREHISTORIC WANDERINGS OF THE HITTITE GREEKS

The following paper was presented, in abbreviated form, at the meeting of the Philological Association of the Pacific Coast, at San Francisco, November 26, 1920.

A1. Until comparatively recently,[1] the Hittites were known only as one of many peoples in or near Palestine.[2] But for some time now we have known, chiefly through Egyptian and Assyrian sources, that the Hittites of the Bible were but the last remnants of a great people that once held sway over Asia Minor, Syria, and Mesopotamia, with its chief capital at Pteria, in northeastern Asia Minor (§ A12).

A2. Hittite writing is of two kinds. The native script is acrophonic pictographic writing, similar to Minoan writing (A, §§ 17 ff.). In such script each pictogram is a crude picture of some object and is intended to bring to the mind of the reader, not the object depicted, as it does in ideographic pictographic writing, but the initial sound or sounds of the *name* of the object, as though we were to use pictograms of a cat, a turtle, and a pillar to spell the word *caterpillar*. Such writing was used by the Hittites in cutting inscriptions on rocks and sometimes also when making seals. But in writing letters and business documents, and sometimes in making seals, the Hittites used the Assyro-Babylonian cuneiform script, a system of syllabic writing that had developed out of an earlier pictographic system and was mostly employed on clay tablets.

---

[1] The reader who is not familiar with the recent status of the Hittite question would do well to read Hogarth's excellent articles ("Hittites" and "Pteria") in the *Encyclopaedia Britannica.* For a more extended treatment, he will find very satisfactory Garstang's *The Land of the Hittites.* The most recent work on the subject is Eduard Meyer's admirable *Reich und Kultur der Chetiter* (1914). Since this was written, Cowley's *The Hittites,* the Schweich Lectures for 1918, has appeared (Oxford Press).

[2] See the first chapter of Sayce's *The Hittites* and the first section of Hogarth's article, "Hittites." Of the many passages in the Bible in which the Hittites are mentioned, I may cite Genesis x : 25, xxiii : 3 ff., xxvi : 34 f., xxvii : 46; Ezekiel xvi : 3, 45; II Samuel xi : 2 ff.; I Kings x : 29, xi : 1; II Kings vii : 6; Judges i : 26; Deuteronomy vii : 1; Joshua i : 4; Numbers xiii : 29.

A3. The first bit of Hittite that I succeeded in interpreting was the acrophonic pictographic writing on the Tarcondemos Seal, usually erroneously called a "boss." This was in November, 1912. Later I deciphered other pictographic texts. All these I first read as Javonian Greek (§ A9), the pictograms lending themselves to this interpretation. Later, however, I perceived that the texts could as well be read as non-Javonian, the pictograms being capable of either interpretation (Hempl, *TB.*, § 69), and the dialectic character of the text depending on the interpretation chosen for the pictograms. In the course of time, pictographic texts will doubtless be found in which the dialect will be betrayed by the fact that the text contains words peculiar to some dialect, or because the pictograms used in writing some word are such that they produce a special dialectic form, no matter what dialectic rendering be assigned the pictograms, or because the texts produce sense only if the pictograms be given the values peculiar to some particular dialect. In fact, such determination of the dialect of pictographic texts will doubtless in time become an important branch of Hittite study.

A4. The first report on my Hittite studies was made in Ann Arbor, at a gathering of old friends and former colleagues at the University of Michigan, March 29, 1913. This report was repeated the following month before the San Francisco Society of the Archaeological Institute of America. Out of this report developed the paper "The Hittite Text on the Tarcondemos Boss," published in *The Flügel Memorial Volume,* Stanford University, 1915. I succeeded in reading cuneiform Hittite in December, 1912, and announced the fact at the meeting of the San Francisco Society of the Archaeological Institute of America, at Berkeley, April 12, 1913. The first public presentation of the subject was made at the meeting of this Association the following November. An abstract of this report, entitled "The Old Doric of the Tell-el-Amarna Texts," was published in *The Transactions and Proceedings of the American Philological Association* (1913), XLIV, 185–214. A subsequent paper, dealing with the Trilingual Glossary, published by Delitzsch (§ B3), was read at a special meeting of the Archaeological Institute of America, at Stanford University, August, 1915, and published in *The Nation,* New York, September 9 of the same year. A revision of this paper will be found in this volume, § B1 ff. A later paper, "Hrozný's Decipherment of Cuneiform Hittite," was written for the meeting of this Association held in November, 1918, but because of my illness at the time, was not read.

A5. In the paper presented to this Association at its meeting in November, 1913, and in the abstract published the following year (§ A4), I showed that the language of the Hittite cuneiform texts is a form of Doric Greek. This Doric Greek, while closely related to European Doric, betrays various distinctive characteristics, which can be explained only on the assumption that the Hittite Dorians had long been separated from the European Dorians (§ A55). At the time I presented the paper referred to, I supposed that the Doric Hittites were Hittites only secondarily, having assumed the name of "Hittites" soon after 1400 B.C., when they had conquered the Javonian Hittites of Pteria (§ A6). I was led to this idea by the fact that 1400 B.C. is also the estimated date of the Doric invasion of Crete.[3] But I have since observed (§ A17) that we have reason to assume that there always were bodies of Dorians accompanying or near the Javonian Hittites. As the Dorians that overcame the Hittites at Pteria spoke a Doric that betrays long separation from the Doric speakers hitherto known, it seems to me to be more reasonable to conclude that the Dorian Hittites were the very Dorians that had long accompanied the Javonian Hittites on their way to Turkestan and the territory to the south of it and ultimately to Asia Minor. Nevertheless, it is not altogether wrong to say that the Doric Hittites were Hittites only secondarily; for, in so far as the name *Hittites* is used to designate the people of Pteria, the Dorians were intruders in Hittite territory. In general, however, I prefer to use the name to designate all the descendants of the great body of Greeks who very early migrated from Europe to Turkestan and there established a new Greek center.

A6. That the Hittites in Pteria were Javonians is proved in various ways. In the first place, Pteria is situated in the heart of Javonian territory, as betrayed by geographical names in *-ene* (§ A13). In the second place, in his *Song of Triumph* (§ A12, *OD.*, p. 186), Lappaios, the Doric conqueror of the Hittites, speaks of them as 'Ιαϝενες. This name is the *e*-grade of 'Ια[ϝ]ονες, applied by Homer (*Iliad* xiii, l. 685) to inhabitants of Attica; and 'Ιάϝονες is the earlier form of Ἴωνες, 'Ionians.' For the division of Javonians into *Rē*-Javonians and *Rā*-Javonians, see § A9.

A7. If Hrozný is right (and he probably is) in placing King Telibinuś (*HKB.*, p. 90, and *Hethitische Könige*, p. 53) earlier than King Suppiluliuma (Σαπελλ[y]όμα, accusative of *Sapalulu*/Σαπελλ[y]ῶ[ν], throne-name assumed by Lappaios's successor, Hempl, *OD.*, pp. 192 f.), it would appear that the Doric conquest of Pteria by Lappaios was not the first Doric conquest of Pteria, for the long interesting edict of Telibinuś (Hrozný, *HKB.*, pp. 90–129) is written in Doric Hittite.

A8. Moreover, it would appear that Doric conquest of Pteria, though it brought about a Doric court and made Doric Hittite the court language, did not displace the Javonian population and its Javonian speech.[4] For, in recording the overthrow of Pteria by Croesos in the sixth century, Herodotus speaks of the inhabitants as "White Syrians," which seems to mean blond Hittites, that is, Javonian Hittites.[5] The city he calls Πτεϱίη (Ionic for Πτεϱία), which shows that the Javonian and not the Doric form (§ A47) of the name was still in use in the time of Herodotus.

---

[3] "There was undoubtedly a cataclysmic moment at Cnossus which resulted in wholesale destruction at the end of what is called the Second Later Minoan Period, i.e., about 1400 B.C. Similar cataclysms, it may be added, seem to have occurred also on all other important Cretan sites yet examined, and at more or less the same moment." Hogarth, *Ionia and the East*, p. 32.

A**9.** We have long been accustomed to the use of the name *Ionians* in two senses: first, in a restricted sense, to designate those Greeks in whose speech old long ᾱ always appears as η, and secondly, in a broader sense, to designate these Greeks and also those that have η for long ᾱ, except after ε, ι, and ϱ. But this ambiguous use of the word *Ionians* has always been objectionable, and it now becomes even more so, for it is evident that the group of Greeks in whose speech long ᾱ was more or less generally palatalized to η was far larger than we have supposed. I have, therefore, for some years past[6] used *Javonians* in the more general sense, harking back to the older form of the name, that is, 'Ιαυονες. Those Javonians in whose speech old long ᾱ still appears after ε, ι, ϱ, we may then distinguish as *Rā*-Javonians—specifically, the Athenians, the early Minoans (§ A49), and most of the Javonian Hittites—while those who regularly have η for old long ᾱ may be termed *Rē*-Javonians—specifically, the Ionians, some (§ A16) of the Javonian Hittites, and the Philistines (§ A56).

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[4] Certain Hittite centers that originally were Javonian did later become Doric, the fact being betrayed by the retention of the Javonian η in the stem of their names, just as an original Indo-European *ē* would have been retained while the Doric α-inflection was substituted for the Javonian η-inflection. So *Mēdā*(*n*), Assyrian spelling: *Mid*(*t*)*an*, more often with an added Assyrian inflectional ending: *Mid*(*t*)*ani*, *Mid*(*t*)*ana*, *Mid*(*t*)*anu* (Hilprecht, *Assyriaca*, I, 127; Hempl, *OD*., p. 187). Similarly *Saccasena* (32°/38°, see footnote 15, § A13*b*, below), etc. (§ A17, 3, end). Compare also the personal name *Tarcondemos*/*Tarcondamos*, whose Assyrian form *Tarqudimme* clearly points to Javonian Greek Ταϱϰώνδημος or Ταϱϰόνδημος (Hempl, *TB*., § 65 ff.).

As for the name *Tešup*, *Teśupaś*, etc., that is Θησιππος, the full form of Θησεύς, 'Theseus' (Gruppe, p. 584), literally, 'Hippe's suckling,' or 'Hippe's fosterchild.' I was in error in saying (*OD*., p. 188) that we should expect Θᾱσιππος in Doric, for the η is, of course, not from old long ᾱ, but represents original *ē*. As to Thesippos, 'the suckling, or fosterchild of Hippe/Hippa,' I might here say that the Hittite horse-goddess, Hippe/Hippa, reappears in legend as the nurse of Dionysos, who was nothing but a later representative, or hypostasis, of Thesippos/Theseus; similarly Hippe appears in Hesiod as a wife of Theseus and in the story of the Amazons as Hippolyte, the wife of Theseus. See Leonhard, *Hettiter und Amazonen*, especially p. 239.

[5] On the publication of my communication to the New York *Nation*, of September 9, 1915 (p. 1, par. 4, end), I received a letter from Professor Bates of the University of Pennsylvania, in which he wrote: "I have wondered whether you were acquainted with von Luschan's theory of the Hittites. He thinks that anthropology proves that the Hittites and the Dorian Greeks, that is, the black-haired Greeks, are one and the same race; that, in fact, the black-haired Greek of today is Hittite. If I remember rightly, he regards the light-haired Greek (the type of the Hermes of Praxiteles) as Ionian." This is all that has come to me of von Luschan's views on this subject. His theory would seem to harmonize with the one-time use of the term Λευϰόσυϱοι, or white Syrians, to designate the Javonian Hittites of eastern Asia Minor in distinction from those that were ἐπιϰεϰαυμένοι τὴν χϱοάν, or Black Syrians, who dwelt east of Mount Amanus and probably were descended from Doric Hittites (like those just east of them, in Mesopotamia (§ A17), and the peoples with whom they blended. These terms arose at the time when the name *Syria* (a form of *Assyria*) was applied to the great stretch of territory between Palestine in the south and Syria's Promunturium on the Euxine; Cappadocia, or the portion north of Mount Amanus, being also spoken of as ἡ ἑτέϱη Συϱίη, 'the other Syria.'

A10. On learning that Hittite turns out to be Greek (§§ A3 ff.) one is tempted to assume that, when the Hittites, like other Greeks, came from their original homes in central Europe, they did so by the same direct route that was pursued by their distant kinsmen the Phrygians and still later by many bodies of other distant kinsmen, for example, the Galatians, when they came down the Danube, across the Balkan peninsula, and over the Hellespont to the highlands of Asia Minor. But there is a lack of evidence that any large number of the Hittites ever occupied much of western Asia Minor (§ A23, end) or even that they passed eastward through it. And when we consider that distant kinsmen of the Hittites, namely, Aryans, passed across the northeastern corner of Asia Minor and wandered on to what was afterward Persia and India, and when we recollect how, at a much later time, the Goths trekked back and forth over the ancient world, we see how unreasonable it would be to deny that the Hittites may have early left central Europe and strayed far into the east before turning south and west, thus making their way into northeastern Asia Minor.

A11. When we did not yet know that the Hittites spoke an Indo-European language, attention had been called to various facts that seemed to point to the east as their former home, or at least their temporary abiding-place. I may best quote from Garstang:

> We must recall the singular relations between the painted pottery of Sakje-Geuzi[7] with that of Turkestan, extending over a long range of Post-neolithic culture.[8] Another link is the early employment by the Hittites of the horse, dating from at least the beginning of the second millennium B.C., and the antiquity of the remains of horses found equally in the mounds of Turkestan.[9] Another item of evidence on

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[6] Hempl, *OD.*, p. 207, and elsewhere.

[7] An important and very ancient Hittite center in Commagne, north of Marash (Garstang, *Land of the Hittites*, p. 413).

[8] Pumpelly, *Explorations in Turkestan* (1908), I, Pls. 29–31.

[9] *Ibid.*, I, pages 38 ff. I may here remind the reader of the recent discovery in eastern Turkestan of texts in an Indo-European language (Tocharian). (Cf. § A46; and Giles, "Aryan," *Encyclopaedia Britannica*, II, 712.) [Cf. Sieg and Siegling, *Tocharische Sprachreste*, I, Berlin, 1921.—F. A.]

> this question may be found in the footgear of the Hittites, which, except in the later sculptures of North Syria, is always represented . . . . as a shoe or boot with upturned toe. This feature is now specially characteristic of the Tartar peoples, and hence another eastward connection is suggested. . . . . However that may be, most scholars are agreed that it argues a mountain origin for its Hittite wearers, and this suggestion is borne out by the mountain cults found in the Hittite pantheon. The mountains by which the Hittites reached the plateau of Asia Minor are not far to seek; they lie eastward, in Armenia, the Caucasus, and the Taurus.[10]
>
> We have dismissed the direct evidence of the pigtailed element amongst the Hittite peoples . . . . lest we should push the argument therefrom further than might be warranted. We may regard these facts, however, as a general indication of relationship with the East.[11]

A**12**. New light is now thrown upon all this by a geographical-philological observation of importance. We may first, however, recapitulate a bit. It has been learned in various ways that the great capital of the Hittites was long at Pteria (§ A1), in northeastern Asia Minor. As we have seen (§§ A5, 6), not far from 1400 B.C., Pteria was conquered by a Doric prince named Lappaios, who boasts (Hempl, *OD.*, p. 186) of having invaded the land of the *Iavenes,* the people of "inviolable Pteria" (*aš-šu-ú-li ḫa-at-ra-ai* = ἀσυλι[12] Ϙατραι, Attic ἀσύλου Πτερίας), which makes it clear that the early Hittites of Pteria belonged to the same group of Greeks as the Ionians and the Athenians, namely, to the Javonians (§ A9), the Greek group reflected in the eighth-century Bible story about Javan, one of the supposititious grandsons of Noah. That Lappaios and his people were Dorians is made clear by the fact that Doric is the speech employed in his *Song of Triumph* (§ A6), as also in the royal documents of his successors.

A**13** (*a*). Now, what was at one time or another Hittite territory, whether Javonian or Doric, may in large measure[13] be determined by the distribution of geographical names of the type familiar to us in Mytilene (*Mitylene,* Doric *Mitylana*) and *Messene* (Doric *Messana*). We here have to do with the Indo-European adjective ending *-ānos/-ānā/-ānom,* an *n*-suffix that arose in connection with *ā*-stems (Brugmann, Vol. II, Part I, § 192).[14] It is most familiar to us in Italic, for example, *Roma—Romanus,*

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[10] Garstang, *op. cit.*, pp. 320–21.

[11] Garstang, *LH.*, pp. 319–20.

[12] The locative-genitive in *-ī*, found in Latin, Venetic, Etruscan, Celtic, etc.

[13] The determination could be still more exactly made by the systematic inclusion of all regions with names like 'Αϱαξηνὸν πεδίον and all those whose inhabitants had names like Πλακιηνοί, Παϱιανοί, etc.; but this undertaking, valuable as its results might be, I can not now enter upon and I therefore content myself with citing only such of these forms as have chanced to fall into my hands. See also § A15, end.

[14] So far as I know, the most specific reference to our suffix, as a termination of geographical names, is made by Fick: "Auf ην besser wohl -ήν, gehen aus die Fluss-

Africa—Africanus, etc. But it is also found occasionally in other Indo-European languages, for example, Sanskrit *ūrjā́—ūrjā́nī,* Greek ἀκμή—ἀκμηνός, etc. Through the Romanic element in English it has become one of our most common adjective suffixes, for example, *Rome—Roman, Italy—Italian, America—American,* etc.

b) It is particularly common in geographical names found in what is unquestionably Javonian Hittite territory. Observe *Pimolisene* (35° / 41°),[15] *Saramene* (33° / 41°), *Gazacene* (33° / 40°), *Colopene* (34°/39°), *Agriane* (36°/40°), *Sargarausene* (32°/39°), *Chammanene* (31° / 39°), *Morimene* (31° / 38°), *Melitene* (34° / 38°), *Commagene* (35°/37°), etc. (See also § A15, and n. 1.) In such feminine geographical names we have to do with a feminine adjective limiting χώρα, 'land' or 'territory,' understood, and designating the land or district belonging to a city or bordering upon a stream: *Paraetace—Paraetacene* (67°/38°), *Arzen—Arzanene* (39°/38°), *Choara—Choarene* (50°/35°, see § A14, 4), *Modra—Modrenae* (29° / 40°, see § A47, n. 66), *Patale / Pat*(*t*)*ala—Patalene* (65°/25°), *Susa—Susiane* (45°/30°), *Sardes/Sardis—Sardiane* (25°/38°), *Phasis—Phasiane* (39°/40°), *Margus—Margiane* (60°/37°, see § A25*b*), *Araxes/Araxis—Araxene* (§ A15, n. 16), etc.

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namen Θηρήν, 'Ελλήν die Stadtnamen 'Αραδήν, Βλισσήν = Λισσήν, Λεβήν, Ριττήν (Ριζηνία) und daneben auf -ήνα Βλισσήνα Λεβήνα, Σουλήνα (Σουλία), denen man neugriechisch Aradena anreihen kann. Die Namenbildung ist . . . . den Griechen ursprünglich fremd, in der Form -ηνα in Lykien in Σίμηνα, Τύμηνα zu belegen, ausserordentlich haüfig ist der Ausgang in Kappadokien s. Georg Meyer 'Die Karier' in *Bezzenbergers Beiträge,* 10/181." (Fick, *Vorgriechische Ortsnamen,* p. 36.) "Die Bildung des Namens [*Tyrsener*] ist nicht griechisch, dagegen sind in ganz Kleinasien die Ethnika auf -ηνός, -ᾱνός sehr häufig: die Bewohner der pelasgischen Orte Σκυλάκη, Πλακία, Πάριον hiessen Σκυλακηνοί Steph., Πλακιηνοί Hdt. 1, 57, Παριανοί Steph. Die Form -ανός erscheint nur hinter ι und ρ, wie z. B. in Σαρδιανός und 'Αγκυρανός danach würde Τυρσηνός mit η die alte echte Form des Namens sein." (Meyer, *op. cit.,* p. 100.)

There are certain things about these statements that I do not understand. For example, I do not see why Fick presents only the form -ηνα and not the far more common -ηνη and why he made no mention of *Mytilene, Priene,* etc., and of *Messene,* while he went out of his way to mention the insignificant *Scylaceni, Placieni,* and *Pariani* (§ A6). One wonders why he twice insisted that the forms in -ηνός/ᾱνός are not (originally) Greek. But it is still more remarkable that he observed the distinction -ηνη as compared with -ιᾱνη and -ρανη, but gave no indication that he perceived that this accorded exactly with the familiar formula for Attic Greek. (No cases with preceding ε appear to occur.) It seems almost as though we had to do with intentional or voluntary blindness. Unfortunately Kretschmer's teachings have brought it about that many classical scholars regard it as sound doctrine to refuse to see anything Indo-European in Asia Minor.

[15] [Location by latitude and longitude north and east is indicated by degrees in parentheses following place-names.—F. A.]

A**14**. In many cases we do not know the primitive, or know it only in a later or related form; for example, *Zabdaeon* and *Be-zabde* for **Zabdice,* the basis of *Zabdicene.*

(1) In some cases the name of the district displaced, in the course of time, the name of the town. Thus, *Sogdiane* is the name of a town (65°/39°) as well as of its district; *Messene/Messana* ultimately took the place of *Messe/Messa;* and *Melite,* though persisting at Athens, was displaced in Cappadocia by *Melitene.*

(2) When the name of the district—for example, *Carmana* (55°/31°), *Messene* (19°/37°), etc.—became the name of the town, a new name in *-ia* (*Carmania, Messenia,* etc.) sometimes designated the district.

(3) Eventually the ending *-ene,* etc., lost its adjectival character and, ceasing to imply a district, could be used to form town-names directly. Thus, *Priene,* an old port or market at the mouth of the Maeander (§ A53), is from πϱίαμαι, 'purchase,' 'buy' (§ A24, *a*).

(4) The list beginning *Paraetace,* etc. (§ A13 above), is typical; that is, pairs like *Paraetace—Paraetacene* are rare, while pairs like *Choara—Choarene* are common. This does not reflect the dialectic variation of -η with long -ᾱ (§ A17); for the forms in -α had become collective neuter plurals, whose long -ᾱ/-η had changed to short -α by analogy to the short -α (< ə) of consonant stems.

(5) But names in *-ena*—like Σαϰϰασηνα (32°/38°) and Λεβήνα and Σουλήνα (in Crete), etc.—are old Javonian singulars in *-ene* with long Doric -α substituted for the Javonian final -η (§ A17, 3, end), and appear long to have remained singulars.

A**15**. As has doubtless been observed, these names are not limited to Asia Minor, nor to what we already know to have been Hittite country. They cover a huge belt of territory, from Imaus Scythicus Mons and the lands east of the Indus, to the Mediterranean and the lands beyond the Aegean. The belt can easily be traced by noting the names on a good classical map. It will be seen that the great majority of these names are Javonian and that most of them do not betray which kind of Javonian they are. Countless illustrations will be found in Pape, *Wörterbuch der Griechischen Eigennamen;* but there is no object now in trying to note all, and I may, for my present purpose, restrict myself to a selection.[16]

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[16] Thus: *Mardyeni* (60°/43°), *Paraetacene* (67°/38°, also 64°/32° and 48°/33°, § A14, 4), *Capisene* (67°/35°), *Pattalene* (66°/25°), *Syrastrene* (70°/23°), *Paradene* (63°/28°), *Astabene* (55°/38°), *Parthyene* (55°/35°), *Comisene* (52°/37°), *Tabeni* (55°/33°, see § A20, n. 25), *Cambadene* (45°/33°), *Sit(t)acene* (42°/33°), *Mesene* (45°/31°), *Phaunene* (47°/38°), *Sacasene* (43°/41°), *Otene* (42°/41°), *Calarzene* (40°/41°), *Siracene* (41°/40°), *Araxene* (42°/40°, from the river Arazes/Araxis, 'dashing,' cited not only in Araxene and in Mesopotamia, but also in Persia and

A16. Of course, we are not surprised to find in Javonian Greek a long α (ā), if ε, ι, or ϱ precedes (§ A13, n. 14); for example, *Arane, Daranon, Angcyranos,* etc., as contrasted with *Cetrene, Gogarene, Mopsucrene, Tibareni, Agareni,* etc., and *Sardiane, Agriane, Laviane,* etc., by the side of such forms as *Placieni.* From which we learn the important fact that some Javonian Hittite was of the Attic type (*Rā*-Javonian), and some of the Ionic (*Rē*-Javonian) (§ A9, n. 6).[17]

A17. Adjoining the *-ene* names we find also *-ana* names.[18] It would appear that most or all of these, too, are Greek, but non-Javonian, in fact, Doric, and reflect Doric population that accompanied the Javonians to Turkestan and the south, and later drifted westward side by side with them (§ A5), sometimes as friends and allies, sometimes as foes (§ A12).[19] For the most part, the *-ana* forms lie south of the *-ene* forms. In the west there are several of these non-Javonian tracts: (1) one very narrow one, which starts on the Araxes (§ A20, n. 24) just west of the Caspian Sea, and crosses Armenia and Pontos, is denoted by the names *Naxuana, Zaruana, Domana* (also in Arabia Felix), *Comana Pontica,* and *Dadastana* (28°/40°); (2) the largest (including all of central Mesopotamia) is outlined by the names *Sisaurana, Libana, Besechana, Appadana, Arabana, Dabana;* (3) the westernmost, starting from the northeast corner of the

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even in Scythia [§ A20, n. 25], as also in Thessaly), *Bagravandene* (41°/39°), *Media Atropatene* (43°/38°), *Adiabene* (41°/36°), *Calacene* (41°/37°), *Zabdicene* (40°/37°), *Gorduene* (40°/37°), *Moxuene* (41°/38°), *Arzanene* (39°/38°), *Anzitene* (38°/38°), *Astianene* (39° / 39°), *Chorz(ian)ene* (38° / 39°), *Derxene* (38° / 39°), *Acilisene* (37°/39°), *Balabitene* (37°/38°), *Sophene* (36°/39°), *Osroëne* (36°/37°), *Commagene* (35°/37°), *Melitene* (36°/38°), *Colopene* (34°/39°), *Gazacene* (33°/40°), *Sargarausene* (32°/39°), *Aquae Saravenae* (32°/39°), *Chammanene* (32°/39°), *Morimene* (31°/38°), *Abrettene* (26°/39°), *Olympene* (26°/39°), *Poemanenon* (25°/40°), *Sidene* (25°/40°), *Mytilene* (24°/30°), etc.

[17] For example (1) Rē-Javonian: *Tabieni* (in Scythia, § A20, n. 24), *Choarene* (66°/28°, 52°/35°, § A21), *Gogarene* (41°/41°), *Modrenae* (29°/40°), *Cebrene* (24°/39°), *Tibareni* (36°/40°), *Perperene* (24°/39°), *Carene* (24°/39°), *Priene* (25°/37°), *Mapsucrene* (32°/37°), *Agareni* (35°/33°), *Cedareni* (38°/32°), etc.; (2) Rā-Javonian: *Sogdiane* (65°/39°), *Bactriane* (65°/37°), *Opiane* (68°/35°), *Margiane* (60°/37°), *Drangiane* (60°/32°), *Susiane* (45°/32°), *Phasiane* (40°/40°), *Laviane* (36°/38°), *Arane* (35°/39°), *Agriane* (33°/39°), *Daranon* (33°/39°), etc.

[18] These names in *-ana,* like other geographical names in α (for example, *Canatha,* Hempl, *OD.,* p. 187; *Saraca,* § A22, etc.), for the most part, became neuter collective plurals. See also § A14, 4).

[19] Among the Doric names in the east will be found: *Ortospana* (67°/34°), *Sindomana* or *-dim-* (65°/27°), *Malana* (63°/26°, also in Egypt), *Artacoana* (60°/34°), *Carmana* (54°/31°), *Portospana* (53°/31°), *Taruana* (53°/28°), *Sagdana* (52°/28°), *Apostana* (52°/27°), *Gogana* (49°/27°), *Ecbatana* (48°/35°), *Tabiana* (48°/29°), *Bagistana* (47°/34°), *Albani* (45°/41°), *Suani* (40°/43°, cf. *Suana* in Etruria, 9°/42°), etc. For the groups of Doric names in the west, see § A17, (1)–(4).

Mediterranean, includes *Adana, Tyana, Osiana, Saccasena* (32°/38°), and *Comana Cappadocia.* Such forms as *Saccasena* (west of *Mazaca,* compare *Sacasene* in eastern Armenia) and perhaps *Osiana* (if this was from earlier **Osiane*) seem to betray old Javonian territory into which Dorians had later intruded,[20] who gave the names Doric inflection but did not otherwise disturb their phonology (§ A8, n. 4), (compare also *Lebena* and *Sulena* in southern Crete [§ A45] and the Lycian town-names *Simena* and *Tymena* cited by Fick above); (4) for the most southerly Doric group, see § A18, 3*b*.

A**18.** On the other hand, there is an important spur of Javonian forms projecting from the main body southward into *-ana* territory, namely in the mountain range (3*a*, below) east of the Tigris, where we find *Cambadene, Paraetacene, Matiene/Matiane, Susiane,* also *Mesene,* the land between the Tigris and the Euphrates at their mouths. We also find a number of Javonian forms in the extreme west (§ A28), in what was later Ionia, and in adjacent territory to the northwest (§ A24*b*, end): namely, (1) *Priene, Sardiene, Mytilene;* (2) *Carene, Perperene, Cebrene, Sidene, Poemanenon, Olympene, Abrettene.* (3*a*) We are surprised to find in Arabia (§§ A27 f., end), west and south of the great Doric territory of Mesopotamia (§ A17, (2)), widely spread reflections of Javonian speech, apparently a southwestern extension of the Javonian speech of the Choathras-Zagros mountains: *Cedareni, Thamudeni* (36°/28°), *Saraceni* (35°/31°), *Gebalene* (33°/30°), *Syene* (32°/24°); but also—(3*b*) such Doric forms as *Thoana* (in Gebalene) and (just south of it) *Adiana, Aelana* ("*Aetana*"), and *Madiana* (§ A17, 4).

The Hittite population of Arabia Petraea and Deserta Arabica is doubtless to be brought into connection with Petrie's discovery of the peculiar Hittite painted pottery at Abydos (§ A31).

A**19.** In dealing with the names in *-ene, -iane,* etc., one is not only struck with their Greek aspect, but is, at first, tempted to suspect, especially in the case of the extreme east, the artificial or literary influence of Greek historians and geographers. A moment's thought, however, suffices to do away with such an explanation; for the ending *-ene,* etc., is comparatively so rare in Greece (§ A47) that its extensive Asiatic use could not have had such an origin.[21]

A**20.** In other words, the geographical names in *-ene,* etc., that we find in Asia Minor and Western Asia indisputably furnish traces of very early Hellenic usage independent of the Greek of Greece. That the forms found in eastern Asia Minor are coincident with Hittite territory is obvious (§ A13*b*) and it would be absurd to attempt to offer a different explanation for the adjoining forms in the more eastern and southern portions of the great belt. The fact that these Greek names persisted so long in all the territory from the Indus westward, and in so pure a Greek form,[22] tells a plain story: namely, that we have to do, not with territory rapidly overrun by bands of men of Greek stock, but with territory long settled by an extensive Greek population, territory, too, that long remained Greek after a large portion of the population had followed the ancient Indo-European custom and moved on. In other words, when at some very early day a large part of the Greek population of the territory lying south of the middle Danube (§ A25*a*) passed eastward and settled in what we know as Turkestan, there thus came to be two widely separated[23] centers of Hellenic population: the original one along the Danube and the younger and apparently larger one in Turkestan. In both, the Hellenic population evidently grew and prospered and from time to time threw off bands or larger bodies of superfluous younger population, which appear to have gone, for the most part,[24] to the more favorable lands lying to the south. That the descendants of these diverse offshoots of the two northern Hellenic centers ultimately met in the intermediate Asia Minor was not at all strange but, rather, what was to have been expected. The Greek population along the Danube and its offshoots to the south we might designate as "Western Greeks," and the Greek population of Turkestan and its offshoots to the south and west we might call "Eastern Greeks"; but these terms are already pre-empted for different bodies of Greeks in Greece. It is, therefore, better to use the designations "European Greeks" and "Hittite Greeks."

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[20] Similarly, forms ending in *-ane* reflect old Doric usage that had been adopted and partly Javonianized by intruding Javonians.

[21] It would, however, appear worthy of consideration whether the ancient Hittite population of Turkestan may not have been in part responsible for the Greek population of the Greco-Bactrian kingdom.

A21. It will be observed that we have not only the same suffix recording the spread of Hittites from the east to the west, but in several cases the very same name. I have chanced to notice the following instances, but

[22] Only occasionally do we find perversions due to the speech of later intruders; for example, in *Sacastane* in Drangiane, for the earlier **Sacasana* = the Javonian *Sacasene,* still attested in northeastern Armenia (§ A17); compare *Abastani* on the Indus, but *Abaseni* in Arabia (§ A18). See also § A30, n. 39.

[23] As to the intervening territory I can say nothing, except to refer to what I have said below (§ A28) as to the Siraces.

[24] It should, however, be stated that various Hittite names (for example, Σάϰ(ϰ)αι, see *Sacasene,* § A15, n. 16, *Saccasena,* § A17, (3), *Sacastane,* § A20, n. 22; 'Αϱάξης, see *Araxene,* § A15, n. 16; Ταβιηνοί, see *Tabieni,* § A15, n. 16, and *Tabiana,* § A17, n. 19) are found in Cisimaean Scythia, and doubtless reflect eastern extension of Hittite-Greek population.

anyone can find for himself many others in Pape. The name *Paraetacene* is found first in the extreme east, in Bactriane; then to the southwest, in Drangiane; and finally still farther toward the west, in Media. *Choarene,* which lies at the foot of the Caspian Sea (50°/35°) and has Choara as its city (§ A13*b*), appears also near the Indus (65°/28°). Its neighbors in the north, *Commisene* (52°/37°) and *Siracene* (in Hyrcania), both reappear in Armenia (41°/40°). The primitive of the latter, namely *Sirace/Siraca* (§ A14, 4) is found in Parthyene (58°/37°). Observe also *Siracene* north of the Caucasus (§ A28). *Gazaca,* the name of a town in Media Atropatene, is reflected in *Gazacene* northeast of Pteria. *Sacasene/*Sacasana,* the more original form of *Sacastane* in Drangiane, we have already found (§ A20, n. 22) on the northeast border of Armenia and it reappears, under Doric influence (§ A17, end), as *Saccasena* (32°/38°) in Cappadocia. See Araxes (§ A15, n. 16) and *Tabai, Tabeni, Tabia, Tabiana, Tabieni, Tabis,* etc., in Pape.

A22. Perhaps the most interesting of these connections is that illustrated by *Saraca* in northern Media, whose Javonian form *Sarace* is found just south of the Caucasus, in Colchis on the Phasis, while the later form *Saraca* (§ A17, n. 18) reappears in southeastern and northeastern Arabia.

> The name *Saraceni* [55°/30°, § A18] was applied by Greeks and Romans to the nomad Arabs of the Syro-Arabian desert who harassed the frontier of the empire. Σαρακηνή, a district in the Sinaitic peninsula, is mentioned by Ptolemy (v. 16). Its inhabitants, though unknown to Arab traditions, made themselves notorious to the adjacent Roman provinces. Thus all Bedouins in that region came to be called *Saraceni,* in Aramaic *Sarkaje,* usually with no very favorable meaning. The latter form occurs in a dialogue concerning Fate written about A.D. 210 by a pupil of Baresanes (Cureton, *Spicilegium Syriacum,* 16 ult.). The appellation then became general, and occurs frequently in Ammianus Marcellinus. The name "Saracen" continued to be used in the West in later times, probably rather through the influence of literature than by oral tradition, and was applied to all Arabs, even to all Moslems.[25]

The *Matieni/Matiani,* whom we found in the Choathras Mountains, in northern Media, reappear in Morimene, in central Asia Minor. Perhaps the most distant wanderers are names like *Matiene* in the territory of the Sabines of Italy, and the *Messene/Messana* in the Peloponnesus and in Sicily.

A23. Geographical names other than those ending in *-ene,* etc., tell the same story of migration westward. For example, the *Harmozia* in Carmania, at the foot of the Persian Gulf, reappears in northeastern Armenia in the town-name *Harmastis/Harmozica.* The *Siracene* at the foot of the Caspian Sea lies in *Hyrcania,* which reappears in the town-name *Hyrcanis* (*Hyrcanius Campus*) in Lydia, and doubtless goes back to the days of

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[25] *Encyclopaedia Britannica* (eleventh edition), XXIV, p. 203.

Hittite suzerainty in Lydia.[26] Hyrcanis lies on the middle route from the Hittite centers in Asia Minor to the Aegean. This route followed the valley of the Hermos, which empties into the bay between the island of Chios and Mytilene.[27]

A**24** (*a*). There can be little question that the *-ene* names in the extreme west, for example, *Priene, Sardiene, Mytilene,* etc. (§ A18), reflect extension of the Hittites from central Asia Minor to the Aegean, by way of the middle and the southern trade routes.[28] And so we are not surprised that the Maeander, down whose valley the southern route descended, had at its mouth a town with so characteristic a Hittite name as Priene.[29]

b) The neighboring group of such names in the northwest might possibly have a like explanation, but their situation (their nearness to the Hellespont and their remoteness from trade routes and from recognized Hittite monuments like those on Mt. Sipylos and Mt. Tmolos in the valley of the Hermos),[30] as also their number and compactness, makes it more likely that they reflect a minor stream of Javonian population that came down by the northwestern route (§§ A18, 28).

c) From names in *-ene,* etc., it is possible also to determine certain questions of relative chronology. Thus, we find the Javonian adjective ending *-ene* added to old Median stems. The clearest of these is *Arzanene: Arzen,* which makes it clear that such Median names were older than the coming of the Javonian Hittites to this section. To be sure, this particular chronology was already revealed by the form *Medan,*[31] but the corroborative evidence is welcome.

A**25** (*a*). Hirt[32] made it probable that the original home of the Greeks was in or near the region known to us as Hungary—more exactly, northern and eastern Pannonia, or southwestern Hungary, together with Moravia. In this connection it is interesting to find on the Danube, near Vindobona (Vienna), and thus practically on the western border of Hungary, the ancient town of *Commagenae*—far more ancient, indeed, than anyone has ever suspected. For it is evident that this locative-nominative[38] cannot be separated from *Commagene,* the name of the Hittite principality west of the Euphrates and just south of the Melitene. Commagenae on the Danube was, then, a Javonian settlement before the Javonian Greeks had left their primitive seats in Europe. In other words, it antedates the extensive prehistoric wanderings that we have traced. This Greek name thus has, so far as we now are able to determine, one of the longest histories of any Indo-European place-names. It is hard to realize this. Certainly we have reason to be thankful for the significant information that is revealed to us by the remarkable preservation of this primitive Greek name down to classical times.

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[26] Hogarth, *I&E.,* pp. 74 f. Garstang, *LH.,* pp. 53, 64.

[27] Hogarth, *I&E.,* p. 65.

[28] Garstang, *LH.,* pp. 167 f.

[29] The inhabitants of Priene, like those of Miletos, claimed to be of Boeotian origin, which may well have been true of that part of the population that was descended from participants in the Ionian Migration.

[30] The original town appears to have grown out of a port or trading-post, a link in the trade route up the valley of the Maeander, as was Miletos on the opposite bank of the river. See § A14.

Wilamowitz-Moellendorff mentions also a Priene and a Miletos in Crete (*Proceedings of the Berlin Academy,* 1906, IV, 74). This may reflect early Hittite migration to Crete (§ A53) as readily as Cretan migration to Ionia (§ A48 and n. 69). Garstang, *LH.,* pp. 167 f.

[31] Hempl, *OD.,* p. 187.

[32] Hirt, *Die Indogermanen,* I, 147. Κομμαγηνή meant originally 'the territory belonging to Commage.' This Κομμαγη appears to be for Κομμαχη < *ϰοπ-μάχη, 'battle,' 'combat'; cf. ϰόπτω, 'strike,' 'smite with a weapon,' 'knock about,' and μάχη, 'battle.' The change from Κομμαχη to Κομμαγη under the influence of γή, 'earth,'

b) In this connection I should also call attention to the river Margus in Margiane, western Bactriane. *Margus* (*fluvius*) is Greek μάϱγος (ποταμός), 'raging (stream).' As used in Bactriane it is an echo of the *Margos* in Moesia Superior (19°/44°), the modern *Morava,* which rises in Servia and flows north, emptying into the Danube just below Belgrade. This *Margos/Morava,* in turn, is an echo of the *Mar*(*g*)*us/Morava/March* that arises in the Hercynian Forest (*Riesengebirge*) and, flowing south, reaches the Danube between Vienna and Pressburg. The Slavic form *Morava* is, presumably, from *Mar*(*g*)*us;* the German form *March* employed in Moravia is the normal German development from *Margos.* Both interesting and instructive is the line traced (1) by the *Maros* in Moravia, (2) by *Commagenae* near its mouth, (3) by the *-ianae* town-names *Mogentianae* and *Sopianae* in Pannonia, and (4) by the *Margos* in Moesia Superior.

A26 (*a*). In brief, the evidence furnished by the geographical names that we have been considering establishes the fact that at some very remote time Javonian Greeks (both *Rē*-Javonians and *Rā*-Javonians), accompanied by some bodies of non-Javonians (doubtless Dorians), left their early seats on the Danube, in and near what was later called Pannonia, and, instead of going directly south to what we know as Greece and the Aegean lands, as their Greek kinsmen of a later time did, made their way, at least for the most part, eastward, across the Scythian lowlands north of the

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'ground,' 'land,' 'country,' was not at all strange in the case of a place-name. For similar geographical names, compare *Battle,* near Hastings, England; *Battle,* La.; *Battle,* Miss.; *Battleboro,* N.C.; *Battletown,* Ky.; *Battle Creek,* Mich.; *Battlefield,* Mo.; etc.

[38] Compare *Cumae*/Κοῦμαι, locative-nominative of *Cyme*/Κύμη; and see § A47, n. 66.

Black Sea, the Caucasus Mountains, and the Caspian Sea, before they turned southward and dropped down into Turkestan and the lands where later arose the empires of the Medes and the Persians. After wandering all over this territory, they evidently turned their faces to the west and made their way into Arabia, Mesopotamia, Armenia, and Asia Minor. It is of interest to observe that the course followed by the Hittites in going from Turkestan to western Asia Minor coincides with that pursued thousands of years later by the Turks on their way to Europe.

b) The fortunate dialectic distinction, *-ana, -ene, -iane,* and *-rane,* that Greek speech presents enables us to observe the very interesting character of the extensive migrations of the Hittite Greeks. It is evident that there was, for the most part, no steady united progress forward, but that, when a community saw best to press on and seek a new home, it did not hesitate to ask permission to pass through the territory of its neighbors, as the Helvetians did when they sought to migrate into Gaul, or even, if this was refused them, to force their way through. For various reasons, the Hittite geographical names deserve a far more searching investigation than I have found it necessary to attempt for my present purpose.

A27 (*a*). It would be folly to assume that the Hittites throughout their long pilgrimage preserved their original Hellenic stock free of intermixture. What we know of similar migrations compels us to assume that they absorbed various alien strains, representatives of peoples through whose lands they passed and of peoples whom they conquered on the way. Even after they had long established themselves in Asia Minor we have to distinguish between the Hittites proper and the various subject peoples, ranging from Semites to Mongolians, who helped to make up their armies and doubtless blended more or less with the Hittite stock. It must be borne in mind that, as Mongolia lies just to the east of Turkestan, Mongoloid admixture was as natural as it is well attested and universally recognized. So far as I know, Hall alone (*The Ancient History of the Near East,* p. 334) pooh-poohs the idea, and in so doing makes the strange confession that for him the pigtail and shaven head of the Chinaman, the Tartar, and some of the Hittites (Pls. XXIII, XXIV) are one and the same as the braid (or Zopf) fashionable for gentlemen in Europe in the time of Frederick the Great.

b) We have many representations of the Hittites and their allies, mostly the work of their enemies, the Egyptians and Assyrians, but also some made by artists of their own. Before it was discovered that Hittite is an Indo-European tongue, it was customary to pick out one or another of these alien strains (the more unlike Indo-European the better, apparently) and denominate it the real Hittite stock.

c) Garstang reproduces (*LH.*, Pl. 83, p. 318) from the temple of Rameses II at Abydos representations of Hittite warriors with pure Greek features, "proto-Greek" Garstang calls them. Now that we know that Hittite was Greek, we are tempted to assume that these were the real Hittites, speakers of Hittite Greek. But we are not warranted in making such an assumption. There can be little doubt that Garstang is right in taking them to be European Greeks (§ A20, end), allied troops of the Hittites and probably from western Asia Minor. The man in the rear has Hittite features and is probably a native attendant.

d) As we have seen in (*a*), it is more than likely that the Hellenic blood of the Hittites had not remained pure, and we should not even expect Hittites to be very like the classical-Greek type. Moreover, we have no reason to assume that the various groups or tribes of Hittites were all alike. They had different neighbors and must have assimilated different strains. Evidently, like Americans, Hittites were of various ancestry and betrayed different features. We cannot pick out any one type and say, "This is the Hittite type." The best we can do, at any rate at present, is to present some of the more common types and say, "These are Hittite types."

e) What would appear to be the most common Hittite type shows heavy, unattractive features, a prominent, roundish nose, and receding forehead and chin. What seem to represent similar but not identical blends of Greek types with less handsome Mongolian types are depicted on some of the Egyptian monuments, for example, those in Figure 4. In spite of the obvious difference between these faces as known to us from classical statues, they have in common the most characteristic Greek feature,[34] namely, the long, straight line made by the profile of the forehead and the nose. Only it is a bit straighter and more nearly vertical among the European Greeks than among the Hittites. It will be observed that the man at the left has a face more "typically Hittite" than the others, the line being less straight and the chin retreating, while the two to the right seem more nearly Greek. On the other hand, in the following representation (Fig. 5) of Mongoloid Hittites or Hittite allies, the man in the rear has a typically Hittite face and may be a native acting as attendant, as in the picture of the Greek allies in Figure 3.

f) The prominent, roundish nose of many Hittites has led some scholars to the theory that the Hittites were responsible for the hooked noses, not only of the Armenians, but also of the Hebrews; and this in spite of the fact that the hooked noses of these three peoples are very different

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[34] This is most strikingly observable in Arabs, who absorbed so many Hittites (§§ A27 f., end).

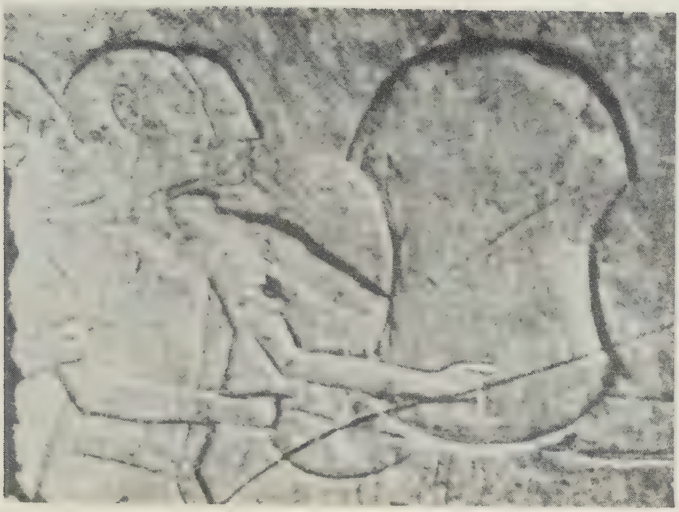

FIG. 1.—Greek type of Hittite allies, from Egyptian temple (*LH.*, Pl. 83). The man at the left looks more Hittite than the other two, having the characteristic receding forehead.

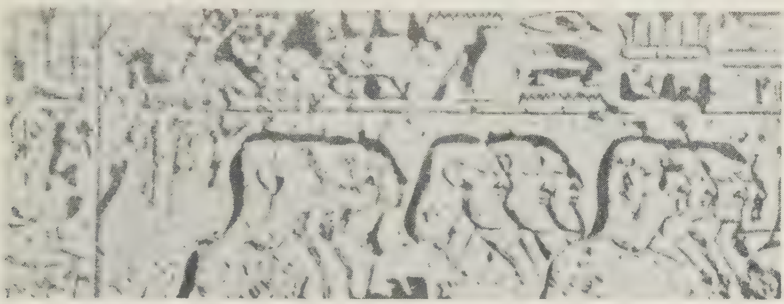

FIG. 2.—Common Hittite type. Egyptian representation. (Meyer, Pl. 1.)

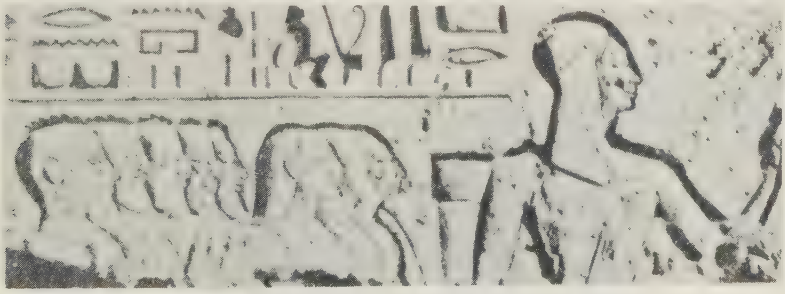

FIG. 3.—Common Hittite type, Egyptian representation, from Cowley's Figure 15.

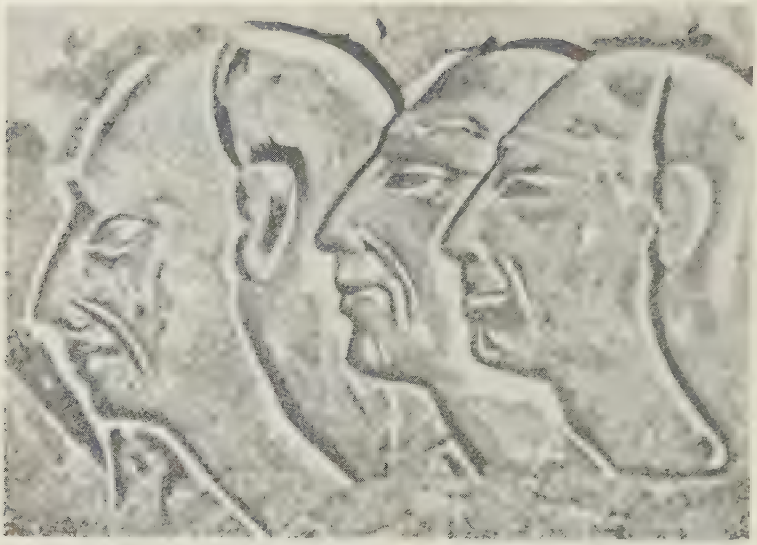

Fig. 4.—Hittites from Egyptian monuments, from Cowley's Figure 16.

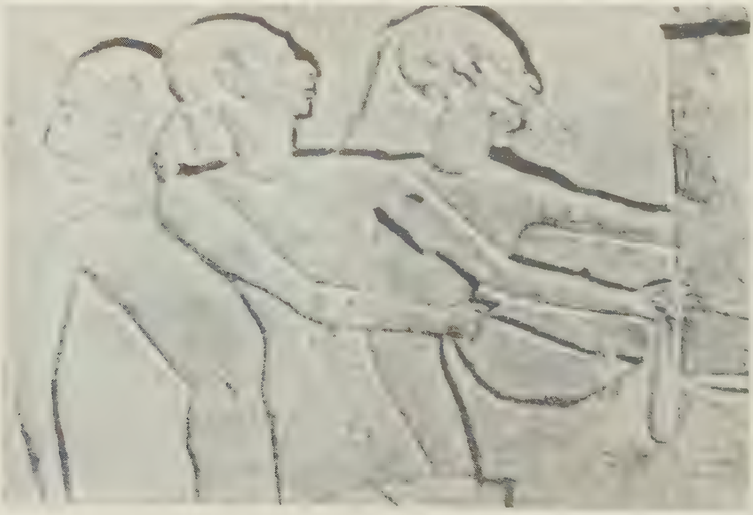

Fig. 5.—Mongoloid type of Hittites, from Egyptian temple (*LH.*, Pl. 83, D).

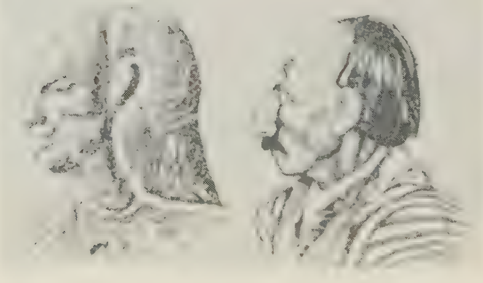

Fig. 6.—Different types of aquiline noses, ancient Hittite and modern Armenian. (After Breasted.)

hooked noses. Breasted[35] held to this theory even after accepting Hrozný's teaching that Hittite was Indo-European, and he attempts to harmonize it with the new teaching by assuming that the Hittites were not Indo-Europeans after all, but that some 1,500 years before Christ, they had adopted Indo-European speech from incoming Indo-Europeans. For such assumptions there is, of course, no warrant whatever. Nor is there any reason why, of the three races some of whose members have aquiline noses, the Hittites should be singled out as the originals and be held responsible. The many representations of Hittites, for example those in Meyer's book, reveal far more straight noses than aquiline. Moreover, we have[36] Egyptian representations of Canaanites from Palestine, with curly hair, hooked noses, and retreating foreheads and chins, as early as 1900 B.C., some five hundred years before we have any evidence of aquiline noses among the Hittites, and hundreds of years before we learn of the presence of Hittites in Palestine. If we consider the evidence of the geographical names in *-ene,* etc., there would appear to have been far more mingling of Hittites with Arabs (§ A18, 3*a*) than of Hittites with Hebrews, and yet most Arabs have straight noses (§ A27*e* and n. 35).

A**28.** But not only did the Hittites absorb alien strains; it is not likely that the Hittite forces that wandered from Europe to Turkestan and Persia and west again to Asia Minor always remained intact. There doubtless were stragglers in various places, and sundry secessions of those that chose to follow a course of their own. We have already observed (§§ A18, 24*b*) that the Javonian names that persisted in the Troad and the neighboring Mysia may be due to a band of Hittites that did not take part in the long trek to the east but deviated to the southeast and crossed the Hellespont. Similarly, of those that did pass eastward, some, for example the Siraces (§ A21) that we find north of the Caucasus, would appear to have been dropped by the way, while others (§ A21) of the same tribe wandered on with the majority around the northern end of the Caspian and, either directly or by the roundabout way through Bactria and Persia, came to Hyrcania before they wandered on into Armenia and the Anatolian lands.

A**30.**[37] We have long profited by the faithful and enlightened work of such able archaeologists as Sayce and Winckler, Garstang and Hogarth, and of late very particularly by the model researches of the distinguished American geologist and archaeologist, Raphael Pumpelly.[38] His investigation of the two Anaukurgans,[39] in which are preserved the records of a Trans-Caspian town thousands of years old, is such that one can only wish ardently that there were more such able and painstaking interpretations of the distant past. The people of the first culture at Anau "had hand-made painted ware, with only geometrical designs," and "only wild animals at first, out of which were locally domesticated the long-horned ox, the pig and horse, and successively two breeds of sheep."[40]

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[35] Breasted, *Ancient Times,* pp. 199, 202, 240, 242, 255, etc.

[36] Breasted, *op. cit.,* p. 197.

[37] [Dr. Hempl's section 29 has been omitted.—F. A.]

[38] Pumpelly, *Explorations in Turkestan,* Carnegie Institution, Washington, 1908.

> The same culture continues until it ceases abruptly at forty-five feet above the base, and is replaced, without transition, by an entirely new population bringing in culture II. There is nothing to show whether the population abandoned the site voluntarily or were driven out or exterminated by an enemy. Some skeletons of adults, who seem not to have been formally buried, were found at this level, and these may be for us the record of a final tragedy. On the other hand, our physiographic analysis of the climatic changes shows a proximate coincidence between the ending of this culture and an extreme of aridity.[41]

A**31.** Peculiar painted pottery of this people has, thus far, not been met with again till we get to Sakje-Geuzi, in southern Commagene, just east of Mt. Amanus. Here it is found, not, as at Anau, in the remains of the earliest culture, but in those of a culture that had intruded after three long neolithic ages, and itself continued for two long ages.[42] Similar pottery has also been found "by Professor Petrie in the Royal Tombs of the First Dynasty at Abydos,[43] and more especially by Dr. Evans in the early Minoan strata of Crete.[44] This accords perfectly with the gradual spread of *-ene* communities from Turkestan to Asia Minor and ultimately to Crete, Cyrene, and the mainland of Greece (§ A47). And similarly in future excavations we shall in general expect the period of this painted ware to be later the farther west we come, and the preceding periods to be longer. We shall look with keen interest for the results of diggings in the lands of the Mardyeni (northern Turkestan), in Sarmatia (especially where the Siraces dwelt, north of the Caucasus, § A28), and along the Danube, at least as far west as Commagenae (§ A25). Pumpelly calculated that the first culture at Anau lasted from 8000 to 6000 B.C. Pumpelly arrived at his conclusions by geologic and physiographic calculations that

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[39] Anau lies near Askhabad, three hundred miles east of the Caspian, south of the Trans-Caspian Railway, and just north of the ridge forming the northern boundary of Persia. *Askhabad* would appear to be an echo of the ancient **Astabana/Astabene.*

[40] Pumpelly, *op. cit.*, p. 38.

[41] *Ibid.*, p. 41.

[42] Garstang, *LH.*, p. 312.

[43] Which gives us the approximate chronology of the *-ene/-ana* names in Arabia Petraea and Deserta Arabica, § A18.

[44] Garstang, *LH.*, pp. 313 f.

I do not understand and cannot follow or judge of. Garstang awaits some revision of Pumpelly's chronology (*LH.*, p. 320, n. 4). But, whatever the absolute chronology, it is highly important for us to note and consider that we now know two independent branches of Greek stock, branches that parted company at so early a day that they had not yet domesticated the commonest animals (§ A30). The bearing of this will not escape the student of the history of Greek speech. It furnishes a clear answer to those who could not accept the Greek of the Phaestos Disk because it did not accord, in all matters, with the sort of Greek known up to that time. (§ A57, end.)

A32. I may here venture to touch upon one or another of the great problems, other than that of the Hittites, upon which welcome light is now shed. In his excellent study *Ionia and the East,* Hogarth again and again finds himself in a position where he seems to feel that the Greeks, the Hittites, and the Minoans must have been akin, but he hesitates to contravene orthodox teachings by frankly saying so. For example, when speaking of "that large continental area in southeastern Europe, which produces such abundant remains of a culture closely akin to the Aegean," he adds:

> The evidence indicates that we have to do not with a culture derived from the Aegean, but with a local independent development, which proceeded along lines closely parallel to the course of the latter. If we cannot yet venture to say certainly that the Danubian and Aegean peoples were kin, we can see clearly that their cultures were so closely related that, in a rough and large classification, they might be grouped together as one. The whole of southeastern Europe and the Ister might be marked as the common area of an Aegeo-Danubian civilization.[45]

A33. In 1913 I said:

> It is obvious that we must remodel our conceptions of the chronology and prehistory of Greek lands and peoples. The Greek world was a great deal larger, Greek civilization was much older, and Greek speech broke up into dialects at a far earlier day than we have been led to suppose. A thousand new questions arise, and many old problems will have to be reconsidered.[46]

My words have proved even more prophetic than I foresaw. At that time I had not yet conceived of the vast portion of the earth's surface that Greek prowess had mastered or of the myriads of men of Greek stock who had met the shock of battle before Homer's heroes trod the plains of Troy. Among the problems that now appear in a new and clearer light are the Homeric question, the origin and age of the Ionic dialect and Ionic civilization, and the extreme age of Greek dialects and civilization in general.

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[45] Hogarth, *Ionia and the East,* p. 110.

[46] Hempl, *OD.*, p. 196.

A34. There has been, during the past thirty years, some tendency[47] to belittle the antiquity and importance of the Javonian palatalization of long *ā* to *ē*, and to try to make it seem probable that the Ionic dialect arose in Ionia after the Ionian Migration.

A35. Meyer[48] urged that Ionic Greek and the very name *Ionian* arose after the Ionian Migration and that there were no Ionians before Greeks colonized the coasts of Lydia and Caria. He admits the possibility that some large movements from Attica may have precipitated the migration, but he wishes us to understand that for the most part it consisted in the gradual emigration of the population of central Greece to Asia Minor, that this population consisted of the most diverse elements, which blended in Asia Minor into a new people with a new name[49] and a new dialect, and that the peculiar features of this new speech (palatalization of long α to η and the early loss of ϝ) were nothing brought from Attica or from any other place whose Greek dialect had about it anything that we could characterize as Ionic; but that they were the result of a blend, in Asia Minor, of the various forms of Greek brought there from Greece. Meyer failed, however, to make it clear how the blending of various dialects, no one of which had a palatalized α, could result in a new dialect whose chief characteristic was such a palatalized α. Indeed, a priori such a result would be most unexpected, and we should not, of course, be warranted in assuming such a thing without further ado (§ A37).

A36. This new dialect Meyer conceived of as then passing over the Aegean, by way of the islands, to Attica, where, checked by counter currents, it appears in a more moderate form, that is, with long α after ε, ι, and ϱ. Having denied Attica any Ionic usage to start with, it was, of course, necessary for Meyer later to get the dialect over there from Asia Minor. But his means of accomplishing this without assuming a reverse migration from Ionia to Attica is quite inadequate. There is, I know, such a thing as the movement of a dialectic peculiarity without a corresponding movement of population.[50] But this is inconceivable unless there is contiguity of population. No such usage can be communicated unless those that give it and those that accept it are in daily communication. Such a shift in usage is really a shift of what was once a border line between contiguous diverse populations, and it could, of course, not be assumed under conditions in which every communication implied a voyage. Moreover, it may be easy to represent a traveling usage as "checked by counter currents," especially when we are thinking of a sea like the Aegean, but such a figure of speech needs clarification and materialization before it can add force to a statement. In other words, Meyer's famous attempt to explain Ionic speech in Asia Minor and in Attica had little about it that could make it plausible, even before we knew that Javonian Greek was many ages older than Meyer supposed it was. One cannot but wonder whether Meyer would still have thought there was nothing Ionic in Achaea, Argolis, and Attica before the Ionian Migration, had his attention been called to the *-ene* geographical names in this territory (§ A47).

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[47] Eduard Meyer, *Geschichte des Altertums,* II, 75, and *Forschungen zur alten Geschichte* (1892), I, 133; Kretschmer, *KZ.* (1889), XXXI, 285 ff.; *Glotta* (1907), I, 30 ff.

[48] *Philologus* (1889), II, 270, *Forschungen zur alten Geschichte,* I, 132 ff., 134 ff.

[49] Farther on, Meyer says: "Damit soll natürlich nicht bestritten werden, dass schon vorher irgendwo ein Stamm existert haben mag, der sich Ionier nannte und nun dem neuen Volk den Namen gab; nur wissen wir davon nichts. . . . . Sehr möglich, dass irgend ein Volkstamm, der ganz oder theilweise nach Kleinasien hinüberzog, den Namen Iawoner auch schon vorher getragen hat, in Boeotien oder in Elis oder in irgend einer Gegend Attikas oder Euboeas. Ebenso möglich ist es aber, dass der Name erst in Kleinasien gebildet ist." The earliest occurrence of the name is, so far as I know, in the *Song of Triumph* of Lappaios, the Doric conqueror of Pteria, who used it in speaking of the Javonian-Hittite inhabitants of that city. This was about 1400 B.C. See § A6. I may add what Wilamowitz-Moellendorff says: "Am letzten Ende, wird der Ionier Name von einem kleinem Stamme herrühren, ebenso wie der der Achäer und Hellenen; der Stamm wird auch wie jene bis nach Thessalien hinauf zu verfolgen sein; aber für die Herkunft der asiatischen Ionier wird das ebenso wenig ausmachen wie für die der Athener," *Ueber die ionische Wanderung, Sitzungsberichte der könichlichen preussischen Akademie* (1906), p. 173.

A37. Kretschmer objected to the classification of Greek dialects on the basis of palatalization of long α to η (§ A42); he, therefore, sought to destroy the significance of Javonian palatalization by attempting to show that it took place at a far later date than had previously been held.[51] In so far he was in sympathy with Meyer; otherwise his position was quite the opposite of Meyer's. Kretschmer knew it would not do to assume, as Meyer did, that an amalgamation of diverse α-dialects might, by some magic, result in an η-dialect (§ A35).

A38. Furthermore, Kretschmer remembered that in historical times Javonian speech was spread out over many islands and shores—"über ein nicht continuirlich verbundenes, sondern durch das meer vielfach durchbrochenes ländergebiet"—and he realized that this geographical status could not be dealt with as though we had to do with a plain having on it adjoining populations. He perceived that the Javonian palatalization could not be supposed to have taken place independently in all these separated places. So he was forced to assume that the process had at least begun at the time when the seats of the Ionians and those of the Athenians still adjoined one another in mainland Greece, in other words, before the Ionian Migration. He would have us believe, however, that it had not progressed far, until some time after the Greeks were settled in their new Anatolian homes.

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[50] Compare the gradual spread of *au* for older *ū* (for example, *Haus* < *hūs*) from the southeast to northern Germany.

[51] Nevertheless, he admits that "Von Seiten der Sprachgeschichte haben wir keinen Grund zu behaupten, dass die ionische Dialektgruppe weniger alt als die achäische oder westgriechische sei, sie nimmt neben diesen eine durchaus selbständige Stellung ein," *Glotta,* I, 11.

A**39**. This he concludes from the fact that some of the native words that the incoming Greeks found in Asia Minor with *ā* appear in Ionic with η. That is, he means that these foreign *ā*'s, on entering Greek, were still in time to join the slightly palatalized long Greek ᾱ's and complete with them the palatalization that he assumes had begun in mainland Greece. Of such adopted words there are very few and Kretschmer confesses that in most cases the phonological relations are not so clear that we could with assurance make use of them to determine the time of a Greek vowel-change. One, however, he regards as fully sufficient for this purpose. In Persian cuneiform texts the name of the Medes appears as *Māda* and in the Idalion inscription (Collitz, *Dialektische Inschriften,* LX, 1) as Μαδοι, but in Ionic as Μῆδοι. From this Kretschmer infers that the appearance of η in Ionic Μῆδοι proves that most of the process of palatalization took place after the Ionians got to Ionia. All this is, of course, based on the assumption that the Ionians, on coming to Asia Minor, could not have found there such a form as Μῆδοι, that is, that Javonian palatalization had not yet taken place. But this is exactly what Kretschmer set out to prove, and, therefore, he was not justified in assuming it as a part of the process of proving it. As a matter of fact, I showed in 1913[52] that the form *Mēdān* had as early as 1400 B.C. been adopted from Javonian Hittites by Doric Hittites in Asia Minor, who gave it Doric inflection but did not otherwise disturb its Javonian phonology. And in 1910[53] I had already shown that Javonian η for old long α existed as early as about 1600 B.C. in the *Rē*-Javonian of the Philistines (cp. § A56). And I might have added that the writer of the Phaestos Disk gives us the name 'Ασσησσος in the Javonian form 'Ησσησσος (.ǣssę̄ssos).

A**40**. What Kretschmer may be said to have succeeded in proving is that, if long α had not been palatalized to η when the Ionians came to Asia Minor, it might have been palatalized after that time and given us Μῆδοι for original *Māda*. But that is all that he can be said to have proved, and this really needed no proof. It is clear that Kretschmer contented himself with trying to show that the Ionians might not yet have palatalized long α when they got to Asia Minor but could soon after have done so and thus have come by the form Μῆδοι. This, it seems, was all he thought necessary. But he should, of course, also have asked himself whether, supposing the Ionians on coming to Asia Minor *had* already palatalized long α to η, they might not, nevertheless, have come to say Μῆδοι, though they heard the word with an *ā*. The answer to this would, of course, depend upon what means the Ionians had of imitating foreign *ā*, that is, what Ionic vowel was nearest the foreign *ā*. If the palatalized long α was at the stage *ǣ*, as Kretschmer knows[54] it long was, we should expect η to be used in imitation of the foreign *ā*, by the well-known process called sound-substitution. But if the palatalized long α had risen beyond *ǣ* and had come to coincide, or nearly coincide, with original *ę̄*, we should expect α to be used in imitation of foreign *ā*, the difference in quantity being ignored; and if new long α's had meantime arisen in Ionic Greek, by contraction or by other processes, such a long α would be used and the imitation would be perfect. And this is exactly what Kretschmer found to be true, η being employed in words early adopted, and α in later ones.[55] In brief, Kretschmer's attempt to show that Ionic Μῆδοι proves that the Javonian palatalization of long α to η was late, having begun shortly before the Ionian Migration and been completed after it, was an absolute failure inasmuch as the Ionic form would have been Μῆδοι, whether the Javonian palatalization preceded the Ionian Migration or followed it.

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[52] Hempl, *OD.*, pp. 187, 194.

[53] Hempl, *PhD.*, p. 197.

A41. In the later paper[56] in which Kretschmer touches upon this subject, he attempts to strengthen his position by ascribing the Javonian palatalization to the imperfect Greek of the assumed Carian mothers of the children of the Greek immigrants, suggesting that the quality of the Carian *a* may not have exactly corresponded to that of Greek α. But in thus shifting his basis in his attempt to account for Javonian palatalization, Kretschmer seems to have quite forgotten that in his first paper he had seen good reason for assuming that Javonian palatalization had at least begun in mainland Greece (§ A38), that is, before the migrating Greeks knew they were going to have children by Carian women. But, from the way in which he expresses himself on page 33, it is clear that he was not unaware of the extreme weakness of his whole argument as to the lateness of Javonian palatalization.

A42. Kretschmer's assertion[57] that the palatalization of long α to η "keineswegs zu den häufigen, überall leicht eintretenden Lautveränderungen gehört" is incomprehensible to me. At any rate in Sumerian and

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[54] Kretschmer, *KZ.* (1889), XI, 291.

[55] *Ibid.*, XI, 287.

[56] *Glotta* (1907), I, 30–33.

[57] Kretschmer, *Glotta, loc. cit.*

Semitic speech,[58] as well as in Germanic and Romanic languages, this palatalization is very common, and physiologically it is one of the "spontaneous" shifts most readily accounted for. But there is no need of discussing the point. That the palatalization had already taken place in Javonian Greek at an extremely remote period is now established beyond all cavil. Moreover, it is now clear that Javonian palatalization is the earliest Greek phonological change that we know anything about, and consequently it is equally sure that we should be thoroughly justified in availing ourselves of it in classifying Greek dialects (§ A37) in case we found it convenient to do so.

A**43.** The truth about Ionic speech was somewhat more nearly opined by Ernst Curtius,[59] who believed that Ionia was the home of the Ionians and that Attica had become Ionic [Javonian] in historical times, through immigration from Ionia. It was not, however, until some time after this paper was finished that I found out what any Greek scholar, I fancy, could have told me, namely, how remarkably, except in certain details, the results of my work agree with the keen prognostication of this brilliant Greek scholar of the last century, "who postulated the existence of a prehistoric Indo-European population in western Anatolia. This he held to be not aboriginal, but an earlier migratory wave of the same great stock which was to throw off the European Hellenes. The proto-Ionians, as he called them, who had branched off and entered Asia Minor by way of the northwestern corner, had already established there a culture of Hellenic type ere the historic Ionian Migration from mainland Greece reached Asia."[60] Whether we call this earlier body of Greeks "Proto-Ionians" or "Javonians" is a small matter. That they really came from the northeast and not from the northwest is of more importance. But, taken all in all, Curtius' theory must now be recognized as one of the most remarkable instances of scientific insight and successful interpretation of limited data.

A**44.** In his highly suggestive paper "Who Was Javan?"[61] Professor Burnet frankly said:

> I agree with Professor Ridgway in holding that all the probabilities of the case point in the most distinct fashion to the conclusion that the people of Crete spoke what we should call Greek in Minoan days. . . . . That the Ionians were . . . . , to a large extent, settlers from Crete is no mere speculation. . . . . This is not really inconsistent with the importance of the rôle ascribed by tradition to Athens and Euboea in the settlement of Ionia. . . . . Athens was one of the seats of Aegean civilization; and, after the fall of Argos and Knossos, it was doubtless one of the

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[58] Delitzsch, *Kleine Sumerische Sprachlehre,* § 2.

[59] *Philologus* (1890), III, 479 ff.

[60] Hogarth, *Ionia and the East,* p. 8.

[61] *The Classical Association of Scotland, Proceedings, 1911–12* (1912), pp. 91–107.

> most important left. . . . . That there was an old connexion between Athens and Knossos is probable in itself. . . . . But we are no longer confined to tradition, however respectable. The link between Aegean and Ionian civilization has at last been found, and found just where we should expect to find it, if the view which I am laying before you is correct.

A45. Burnet continues:

> Theodor Wiegand has been excavating at Miletos for ten years, and has laid bare much that is of the highest interest; but nothing of greater importance than the remains of the original Aegean colony. These are thus described by a competent authority:[62] "The oldest settlement on Milesian soil lay close to the coast, about a kilometer from the archaic Acropolis; . . . . at the temple of Athena it was possible to ascertain the existence of a Mycenaean stratum under the Old Ionic, and the slight but well-preserved walls of its houses group themselves into a picture which has many points of contact with late Mycenaean localities in Crete; . . . . In Ionia [the pure Aegean civilization] passes over by a slow metamorphosis into the archaic civilization of Eastern Greece. . . . . The answer to the question of the relation between the archaic period and the prehistoric age of the second millennium has never been given in so clear and simple a form." . . . . I do not think that anyone has yet ventured to say in so many words that the Minoan Cretans were in fact Ionians [Javonians]; but there is really no great originality in that view. It is remarkable how many recent writers have just stopped short of stating it.[63] . . . . But it will be said, "How can the Cretans have spoken an Indo-European language in third millennium B.C., when the accepted view is that the Indo-European peoples did not enter the Balkan peninsula from their northern home until late in the Bronze Age, or even early in the Iron Age?" As to that, I would point out that the accepted view is a mere speculation which must yield to facts.[64]

A46. Burnet was, of course, not aware of the early facts as to the Javonians, which I have presented to you today. Still, at times his position and mine come very near to agreement. But not quite, particularly where he is influenced by Eduard Meyer's recent tendency to revive the theory of the central-Asiatic origin of the Indo-Europeans.[65] For example, on page 104, Burnet says:

> There is not really a scrap of evidence to show where the Indo-European peoples came from or at what date. Indeed there are some new facts which suggest that, after all, the highlands of Central Asia were their original home, and that some of them at least reached the Mediterranean by way of Asia Minor.

I do not deny his new facts, but the conclusions he bases on them. We have seen that the Hittites were Indo-Europeans, that they came from Turkestan, and that some of them reached the Aegean by way of Asia Minor. But this is not the same that Burnet says. The persistence of the

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[62] A. von Salis in *Neue Jahrbücher,* XXV, 129.

[63] Burnet, pp. 96–105.

[64] *Ibid.,* p. 104.

[65] Meyer, *Geschichte des Altertums,* I, Part 2, pp. 799 ff., par. 569.

Javonian name *Commagenae* on the banks of the Danube (§ A25) speaks volumes and makes it clear beyond all question that the *-ene* names found in Turkestan do not indicate the original seats of the Hittite Greeks, but the direction in which they were at one time wandering. It was to be expected that the recent discovery in Turkestan of texts in the Tocharian language, a *centum* tongue (§ A11, n. 9), would lead some scholars to see in this location of an Indo-European language evidence that the Indo-Europeans came originally from Central Asia; but one is much surprised that a scholar so well informed as is Eduard Meyer should have been thus misled. The presence of any isolated Indo-European tongue in any part of Asia will never furnish evidence that can be invoked against the claims of the theory that the Indo-European stock arose in Central Europe, the theory that so satisfactorily fits the historical location of the various branches of Indo-European speech and so thoroughly accounts for the mutual resemblances observed in neighboring Indo-European idioms. The Tocharians could, of course, have gone from Europe to Turkestan as readily as the Hittites did, and even more readily than the Aryan stock made its way to India. The fact that princes of Medan once bore Iranian names simply tells us with greater definiteness what we already knew, namely, that Iranian tribes in wandering from Europe to the east passed through the intervening territory. The fact that we find them on the way brings us no news and in no way justifies us in assuming that the dispersion of the Indo-European–speaking peoples had its center somewhere near where we chance to discover the Tocharians. Nevertheless, Burnet's paper is, on the whole, at once so free from traditional prejudice and so eminently sane that I could not deny myself the satisfaction of noting wherein our positions approach one another.

A**47.** I spoke above (§ A19) of the comparative rarity in mainland Greece of geographical names ending in *-ene,* etc. I have observed: *Pallene* (Chalcidice and Attica), *Amphanae* and *Silana* (Thessalia), *Ctimene* (Dolopes), *Alpeni* (Locris), *Pylene* (Aetalia), *Cyllene/Cyllana* (Aetalia and Elis), *Ismene* (Boeotia), Mt. *Cyllene* and *Pellene* (Achaea), *Arene* (Elis), *Mycenae, Methana* (Argolis), *Anthana* (Laconica), and the Javonianized *Aeane* (Macedonia), *Titane* (Sicyonia), and *Nestane* (Arcadia). There doubtless are some others in Pape. It will be observed that most of these lie close to a line drawn lengthwise through the Gulf of Corinth; in other words, either in Aegialea (territory that we already know to have been early Javonian[66]) or on the neighboring coasts of the Gulf. This distribution has all the appearance of a one-time intrusion of Javonian population. When it was not known that the early Minoans and Hittites were Javonian Greeks, it was natural to assume that the Javonian Greeks in Attica and northeastern Peloponnesus had sooner or later come down from the north as other Greeks did. Hitherto there appeared to be no reservoir from which they could be got. Now, however, we know that there were two more such reservoirs, Crete and Asia Minor. When we consider that the earliest cultural remains in Argolis and Attica are such as our present knowledge of things Javonian would lead us to expect to have come from Crete, and when we remember that the religious conceptions reflected by such objects as the signet-rings from Mycenae and, most strikingly, by the relief of the Lion's Gate[67] are such as betray the perpetuation of the religious conceptions of Javonian Crete and Javonian Asia Minor, it would be little short of folly to refuse to believe that the Javonian speech of the mainland might have the same source.

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[66] *Athenae* was, of course, of other origin, being originally the locative of Athene. The assumption that such locative singulars were nominative plurals was not strange. We have, in English, cases involving the similar assumption, that old adverbial genitive singulars in *-s* (namely, *mornings, evenings, Sundays, Sunday afternoons,* etc.)

A**48.** Some considerations, for example the many *-ene* names in Asia Minor, might lead us to look there for the source of the Javonian element in Attica, Argolis, and the adjacent lands; but the Aegean culture and particularly the few specimens of script found at Orchomenos and Mycenae[68] seem rather, as is generally believed, to point to Crete. And there

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are adverbial accusative plurals, for example, in sentences like "We often go over there Sunday afternoons." As *-s* is rarely a sign of the plural in German, there was no temptation to regard the corresponding German adverbs *morgens, abends,* etc., as plurals. But we may now frankly recognize English *mornings,* etc., as plurals; to our present speech-sense they *are* plurals. Just so the Greeks came to associate old locative singulars like 'Αθῆναι, Μυκῆναι, etc., with plurals in -αι, -ων, etc., and consequently used a plural verb with them, or, if oblique, gave them the plural oblique ending. The use of the locative of the name of the goddess to represent her city is but an instance of the identification of the goddess and her shrine or city. In the *Odyssey* (VII, 80) we still find ἐς 'Αθήνην = 'to Athens.' In the Etruscan of the Lemnos Stone the name of the Gallic goddess *Sirona* < *Sveresōnia* (cf. Oscan dative *sverrunei,* 'spokesman,' and see Planta, I, 528 f.) appears, with initial phonology (Brugmann, I, 329), as *Sērōnā,* while her city Verona has the medial phonology that arose in the locative form *to Veronai, tǫ wērōnai,* 'at Verona'; compare the Umbrian postpositive *tā* (written *-ta, -tu, -to*), 'from.' In Etruscan an unaccented *ā* becomes *ǭ*, as final *ā* does in Oscan and Umbrian.

The earliest form of the name of the goddess Athene is the *Ā-tē-nē Mī-me-ra* of the Phaestos Disk (Hempl, *PhD.,* p. 196). The length of the *A* is betrayed by the meter and was probably due to the loss of the ϝ of ϑϝᾱν. The *t* represents the failure to differentiate τ and ϑ in the syllabic writing of the Disk, as in that of the Cyprian texts.

[67] See Evans' extremely enlightening monograph "Mycenaean Tree and Pillar Cult," *Journal of Hellenic Studies* (1901), XXI, 99–204.

[68] Evans, *SM.,* I, 57, 59.

were *some* names in *-ene* in Crete too (§§ A17, end, and A24*b*, n. 30). There may have been migrations to the mainland from both Crete and Asia Minor, as there were emigrants both from the mainland and from Crete who took part in the Ionian Migration.[69] Of course, the belief that the Aegean culture found in Argolis and Attica came from Crete, if not from some other part of the Aegean area, is now general. But it is commonly assumed that this culture was introduced by people speaking the non-Hellenic language customarily ascribed to the Minoans.

A**49.** What I wish to urge is this, now that we know the speech of the early Minoans was Javonian Greek (cf. "Minoan Seals"), probably very like that of the Javonian Hittites (§ A16), we have every reason to suppose that the Javonian Greek that we find in Attica and in early Argolis may have been and probably was brought in by the very people who introduced the Aegean culture that we find there. It is possible, of course, that some Javonians came down from the north more or less directly to Attica and Argolis, just as has always been assumed, and that they there joined Javonians from Crete and perhaps Asia Minor. But the fact that the great body of Javonians at a very early time left the Danube region and went east to the lands beyond the Caspian and later came west again; and the ready explanation of the Javonians in mainland Greece as immigrants from Crete and perhaps western Asia Minor—these considerations thrust the burden of proof upon those who still would urge that the Javonian element in Attica and Argolis, or a part of it, came directly down from the north as the Achaeans and the European Dorians appear to have done. That we find in the Javonian belt along the Corinthian Gulf quite a strip of *-ene* names but very few in all Crete may be due to their extinction by the later Doric population of Crete, much as such names were so largely lost from southern Peloponnesus.

A**50.** We have seen (§ A16) that most of the Hittites spoke Javonian Greek (either *Rā*-Javonian or *Rē*-Javonian), while some considerable bodies of them spoke Doric (§ A17). In his *Song of Triumph* (§ A6), Lappaios tells us that when he conquered the Javonian Hittites, about 1400 B.C., their empire extended from Palestine to Nysa, doubtless the Nysa on the Maeander. Ten years ago I showed (§ A39, end) that the Philistines, who some thousand years B.C. dwelt near the mouth of the Maeander (§ A56, end), spoke *Rē*-Javonian Greek. I have also shown (in "Minoan Seals") that *Rā*-Javonian (possibly also *Rē*-Javonian) was spoken in Crete in early Minoan times. Now, it hardly needs to be pointed out how remarkably all this accords with Kretschmer's theory that the earliest wave of Hellenic population in Greece and Crete was Javonian.

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[69] § A44. See also § A24*b*, n. 30.

It is particularly gratifying that results obtained in ways so diverse should nevertheless agree so strikingly.

A**51.** The relationship of Pteria to Crete and of both to Attica opens up a field of great and varied interest, and tempts to conjecture. A priori it is more than likely that the two sister dialects are referable to two branches of one and the same people; in fact, it would appear that the two names—*Pteria* and *Crete*—are but diverse developments of the same word. The earliest forms of the name *Pteria* that I have found are Javonian *Q*τερία, genitive *Q*ατριᾶς,[70] and Doric *Q*ατρ[ι]ᾶ (cuneiform *Hat-ra-a, Song of Triumph,* line 10), genitive *Q*ατρ[ι]ᾶς, whence Egyptian *Kfatiu, H(e)ta,* etc., Assyrian *Hatti* (the *-i* perhaps reflecting Indo-European *-ī = ia*), etc.[71] *Pteria* is so obviously a Greek word that it is remarkable that this has not long ago led to the suspicion that the Pterians were Greeks. The word is an abstract-collective (whether accounted a feminine singular or a neuter plural)[72] and means 'rockiness,' 'rocky place,' 'the rocks' (compare ῥωπήια, 'thicket,' 'bushes'), and no name could better fit the location of Pteria. In fact, it would appear that the Hittites, when shifting from place to place, were fond of establishing themselves in a rocky place and of calling it by this name.[73]

A**52.** What we know as to the fortunes of early *q̆* in Greek pertains chiefly to antevocalic *q̆*. The rarity of anteconsonantal *q̆* in earliest Greek brings it about that we have very little material from which to judge what its later development was. Of *q̆t* I know no other case whatever. A priori we should expect such a labiovelar stop-consonant, especially when standing next to another consonant, to lose its velar element and become a pure labial, or to lose its labial element and become a pure velar. In the first case we should get πτ as we get πρ in πρίασθαι, 'buy,' and the name Πριήνη (§ A24*a*, n. 27). And this is what we find in the Ionic Πτερίη of Herodotus, Attic Πτερία.[74] In the second we should get κτ, and this we appear to have had in the later Javonian Minoan of Crete, or the Doric that displaced it. The important element of the change was the metathesis of τ – ρ; nom. *Ϙτερία* (gen. *Ϙετριᾶς*) > *Κτεργᾱ > *Κτείρᾱ or *Κτήρᾱ, then, by metathesis, *Κρείτᾱ or Κρήτᾱ and, with Javonian -η after τ, Κρήτη.[75] The η rather than ει for lengthened ε (cf. φθείρω/φθήρω < *φθέργω, Buck, GD., par. 74) is just what we should expect in Cretan (*ibid.*, par. 25). That the local phonology and orthography of the name became generally accepted and so is found even in dialects that have ει in other such words was natural.

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[70] In acrophonic pictographic writing (§ A2) the labiovelar stop-consonant *q* (more exactly *q̆*) may be spelled with one or more velars, one or more labials, or with a velar and a labial. Thus, *Q*τερία was spelled BIRD - LYRE, πτερ[ων] - ἰα[μβύκη] (*PC.*, II, 68), or FEATHER - LYRE, πτερ[όν] - ἰα[μβύκη] (*PC.*, II, 71); and *Q*ατριᾶς might be spelled COUNTRY - TERNION, γᾶ - τριάς—*CIH.*, I, 21(5), 40(12), *TB.*, par. 35; JAR - TERNION, κέ[ραμος] - τριάς—*CIH.*, I, 22, 19(16), *TB.*, par. 48; JAR - GRUBS - TERNION, κέ[ραμος] - τερ[ηδόνες] - τριάς with τ[ε]ρ being written redundantly—*CIH.*, II, 1; *CIH.*, I, 21 (1), (2), (5) (2*X*); *CIH.*, II, 52 (1), (5); *TB.*, par. 47; ARROW - TERNION, κῆ[λον] - τριάς—*CIH.*, I, 15(2), 21(6); ARM - TERNION, χε[ιρ] - τριάς—*CIH.*, I, 10(3); *TB.*, par. 7; ARROW - ARM - TERNION, κῆ[λον] - χε[ιρ] - τριάς with *q*α- redundantly written—*CIH.*, II, 49(5); WING - TERNION, πτε[ρυξ] - τριάς with τ[ε]ρ redundantly written, *CIH.*, I, 3; FOOT - TERNION, πε[δια] - τριάς—*Liverpool Annals,* II, Plate 38(3); *TB.*, par. 7. Naturally, the genitive is far more frequent than the nominative.

[71] *OD.*, p. 195.

[72] Brugmann, II, Part 1, pp. 184–185.

[73] *OD.*, 195. Compare also *Petra,* in Arabia *Petraea;* and *Perta,* south of Lake Tatta.

A**53.** How Javonian Hittites may have passed over to Crete and become Javonian Minoans, I do not undertake to say, but there certainly were ways enough. It would appear most reasonable to assume that they broke away from the Hittite settlements in Asia Minor and, dropping down the Maeander, passed through Caria and over to the islands; whereby would readily be explained much of the known early relation between Caria and Crete—generally ascribed to migrations of pre-Hellenic population from Crete to Caria. But we are not so uncertain as to when Hittite population may have passed over to Crete. It must surely have been at a very early date, as is shown by the diversity in the development of pictographic writing in Asia Minor and in Crete, as also by the variant development of the *q*-sound in the name (§ A52). It would certainly be a mistake to assume that the migration of Hittites to Crete had to wait until the Hittites' empire extended to the Aegean, as it had by 1400 B.C. (*OD.*, p. 187). Moreover, we know (§ A31) that the painted pottery that the Hittites at Anau had used from the beginning of their settlement in Turkestan was brought to Sakje-Geuzi after the native population there had for three Neolithic ages had only black pottery and pottery with a black pattern on yellow and that it was brought to Crete in early Minoan days. This implies that Minoan culture was ultimately based on comparatively early Hittite culture, as well as upon the native culture found in Crete, and that this new blended culture rapidly outran that of the Hittites who remained in Anatolia. Whether one of the apparent shifts in Minoan culture or administration reflects a later coming-in of European Javonians cannot be determined, but I think it likely.

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[74] We should have expected q̆ετ to become τετ in πέτρος, 'rock.' It would appear that this πετ- was due to the πτ < q̆τ in such derivatives as πτερία ὀρθόπτερος, 'with high hills' or 'with high columns,' and perhaps such as μονόπτερος, 'with a row of pillars only' and no cella, δίπτερος, 'with double peristyle,' that is, if these are distinct from δίπτερος, 'with two wings,' etc., and are derivatives of πέτρος, 'stone,' 'rock,' and not of πτερόν, 'wing.'

[75] Observe also the Cretan town-name Κάτρη, which Fick would derive from Κατρεύς, name of a son of Minos, *HD.*, p. 13.

A**54.** But see as far as we may, we probably shall never be able to know about these matters to a certainty until we are in a position to compare Hittite Javonian and Minoan Javonian with the Javonian we know in Attica and Ionia. Thus far so very little Javonian of the first two kinds has been read that such a comparison is impossible; of Minoan Javonian I have read only a number of seals, which (except for the seal of the priestess of Gaea)[76] rarely contain more than a noun in the nominative with a dependent genitive. Of what we may with certainty regard as Hittite Javonian I know only a few nouns and geographical names. How we nevertheless know that much Hittite was Javonian I have shown in §§ A6, A16, A26.

A**55.** I long ago (§ A5, §B2) pointed out that Hittite Doric, while unmistakably Doric, has several features that suggest a long period of separation from European Doric, that is, the Doric hitherto known to us (§ A20, end). Now that we know that the various bodies of Hittites migrated far to the east. long lived in Hindustan, and then very slowly migrated westward again, the discrepancy between Hittite Doric and European Doric is very satisfactorily explained. We should, therefore, expect to find similar discrepancy between Hittite Javonian and the Javonian long familiar to us, particularly if the Javonian of the west came down directly from the north. If, however, as I have suggested is possible, mainland Javonian is derived from Minoan Javonian and Minoan Javonian chiefly from a branch of Hittite Javonian, we should expect diversity, but much less diversity.

A**56.** Now, it is possible, in fact quite likely, that we should already possess a considerable text of Hittite *Rē*-Javonian. I refer to the Philistine text on the Phaestos Disk.[77] It will be remembered that this text is so strikingly like Ionic that in my account of its first decipherment I spoke of it as "Ionic before Homer." Some of the forms on the Disk are clearly nothing but earlier forms of what we find in Ionic. There are, however, about this early *Rē*-Javonian certain things that could not be accounted for if we considered it only as an archaic form of Ionic. These deviations from the Ionic long known to us are, however, of a nature similar to that of the deviations observable in Hittite Doric when compared with European Doric (§ A55). But the suggestion that the Greeks among whom this unique text arose might be descendants of a branch of the Hittites at once opens up a host of interesting and difficult questions. It will, however, be observed that the geographical element of the problem is very simple and decidedly favorable to the suggestion. For Assessos lies at the entrance to the southern trade route up the valley of the Maeander to the Hittite centers in Asia Minor (§§ A53 and A55, end).

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[76] See *Minoan Seals,* pp. 87–88.

[77] Most classical scholars did not get the import of my popular account of the decipherment of the Phaestos Disk (*Harper's Magazine,* January, 1911), or were actually shocked by it. I trust that my forthcoming fuller and more conventional treatment of it will enable all to perceive its significance and great importance. At present I will state only that the language is a *Rē*-Javonian dialect (§ A9, end), almost identical with Ionic; and that the writer of the Disk informs us that she is Xipho, the august prophetess of Athene Mimera (that is, μέϱιμνα, earlier μέϱμηϱα, 'thought,' 'care,' Etruscan *Menerva,* whence Latin *Minerva*) in her famous temple at Assessos, near Miletos. It will be remembered that the man's head on the Disk wears the feather crown that we know was worn by Philistines, Ionians, and Carians, and, in conventionalized form,

A57. This is not the time to note all the great problems on which new light is now cast. They are many and intricate; and there are scholars far better prepared to deal with them than I am. However such scholars may disagree in interpreting the new-found data, I venture to say that every one of you who today have patiently listened to this paper of mine has been led as never before to realize and to marvel at the evidently innate superiority of the Javonian strain, whether exemplified by Athenians or Ionians, by Hittites or Minoans, in other words, no matter where such Javonians dwelt or what alien strains they may have absorbed and assimilated.

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by the dancing women of the Delphian column. It is not difficult to see that the name *Philistine* is only a foreigner's corruption of Greek φιλοστέφανος, 'one fond of wearing a crown.' See also § A57.

B. HITTITE DORIC, WITH SPECIAL REFERENCE TO THE TRILINGUAL GLOSSARY

FOREWORD

This paper is the revision of one published in *The Nation,* New York, September 9, 1915. The introductory matter in the original is now omitted, as it will be found elsewhere in this volume and does not need duplicate statement. . . . In this paper and the one that follows it I have adopted the term *Accadian* (Akkadian), as used on the continent of Europe and in America, to designate the Semitic people and speech of ancient Babylon, and I employ the term *Sumerian* for the earlier, non-Semitic, people and speech.

[About one-fourth of the paper as it appears here is new. Dr. Hempl originally intended to enclose the new portions in square brackets, but the result was so confusing that I removed them.

ABBREVIATIONS

OD. "The Old Doric of the Tell el Amarna Texts," *Transactions of the American Philological Association,* XLIV, 185–214; references here are to pages, or to page and line where "The Letter of Amenophis III" is concerned. The Letter appears on pages 198–201; lines 14–15 of the "Song of Lappaios" are interpreted on pages 190–91.

L. "The Letter of Amenophis III" as it appears in the revised and completed version printed below under the title "Cuneiform Hittite."

S. "The Song of Lappaios," which is likewise printed below.

Yuzgat. *The Tablet from Yuzgat,* edited by Sayce and Pinches (London, 1907), *Asiatic Society Monographs.*

For other abbreviations, consult the "General List" on page 6 above. *SH.* = Hrozný, *Sprache der Hettiter; TG.* = Delitzsch's edition of the "Trilingual Glossary" (see § B3, below).—F. A.]

HITTITE DORIC AND THE TRILINGUAL GLOSSARY

B1. Hittite Doric differs from the Doric long known to us, not only in being much older[1] (*OD.,* p. 186), but also in having had a long independent development (§ A20). Like European Doric (§ A20, end), it has numerous features that we know as characteristic of Doric Greek. Thus—

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[1] See § B3.

1. It reveals an accent that usually stands one mora farther on in the word than that of non-Doric Greek.[2]

2. Like all non-Javonian Greek, it retains long α where Javonian Greek has changed it to η: (δαμετο(ς) (§ B16, 3), κοσματα(ν), *OD.*, p. 200, line 11, and *L.*, line 11.

3. It not infrequently shows Laconian Doric σ for ϑ (σακε, § B17, 3; Ἰαροσιος, Attic Ἱερόθεος, § B14, 4); observe also the ια = ιε (Buck, *GD.*, § 13, 1), and ιο = εο (Buck, *GD.*, § 9, 4–6, Thumb, *GD.*, § 92, 2).

3*a*. In fact, not only in the matter of σ for ϑ, but also in other matters of phonology (like ι for ε before back vowels) and in vocabulary (for example, σακε, § B17, 3; χαος, § B1, 5; *L.*, l. 25), Hittite Doric strikingly suggests Laconian Doric.

4. Hittite Doric employs the pronouns μι(ν), τι(ν), σι(ν)/ϝι(ν) (§ B7); see *L.*, l. 11 and Commentary.

5. Far more frequently than European Doric (ϑατηϱ < ϑεατηϱ = ϑεατής, Hesychios; ἀμφάλος, Theocritos, XXVIII, 4 = the ἀμφάλο(ς) of the *Song of Triumph,* line 15 [*OD.*, pp. 190, 202], for non-Doric ἀμφίαλος; χαός, Theocritos, VII, 5; compare the reduplicated χαος - χαος, *L.*, l. 25, the Hittite Doric plural, masculine, anteconsonantal [Hirt, *Handbuch*², § 257, 9] form of non-Doric χάϊος,[3] 'good,' 'doughty,' German *'tüchtig'*), Hittite Doric omits pretonic (*du-s* = τους for τεους, § B10; Ἱϱσάβος, etc., § B14, 4; κατϱάς for non-Doric κατάϱας, *C,* Letter, line 17) and initial unaccented (γε for ἀγέ) vowels, thus apparently betraying stress-accent. See also *OD.*, p. 197, end.

B2. On the other hand, Hittite Doric—

1. Simplifies στ(ε)ϱ to σ(ε)ϱ (ϝαλκισ(τ)εϱος, 'strong' [§ B16, 5]; ἱστωϱ, 'wise,' 'skilled'), line 29 of "The Letter of Amenophis III," *OD.*, pp. 198 f., l. 29), ἱσ(τ)ϱωνες, 'dramatic poets' (line 25 of the Song, reproduced below).

2. Like early Latin, Etruscan, and Lycian, it usually drops final *-s* after a short vowel if no initial vowel follows (ἀψοϱϱος 'Ασαι, *S.*, l. 14, but ἀμφαλο(ς), *OD.*, p. 190, and 'Ιαϝενε(ς), *OD.*, p. 186, παφφοϱι(ς), § B12, 3, etc.).

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[2] For practical purposes it is immaterial whether, with Thumb (*GD.*, par. 82), we say that the Doric accent shifted one mora toward the end of the word; or, with Hirt (*Handbuch*², § 272), that in Greek generally the penultimate accent was drawn back one mora, but did not shift in Doric (*Handbuch*², § 279, A7). I am not at present prepared to say which position is in fact the nearer the truth. A study of the cases cited in this volume and in my "Old Doric" will, however, be found fruitful. [See Hermann, *IF.*, pp. 38, 148.—F. A.]

[3] In the majority of cases such an adjective has a long ultima, and therefore the accent on the penult, in Doric on the ultima; hence χαϊᾱ > Doric χαϊᾶ > χαᾶ, and analogically χάϊος > χαίος, Doric χαϊός.

3. It treats final -ν similarly (μιν αὐ, *OD.*, p. 198, 12, but μι(ν) κοιν, *OD.*, p. 198, l. 13) or changes it to the cognate consonant -ϱ:[4] κωϱωϱ ἅπ(α)τοϱ = European Doric κωϱων ἅπτεν (§ B17, 1). See also the following.

4. And it thus has infinitives in -οϱ (ἅπ(α)τοϱ, § B17, 1) and in -ϝοϱ (λυσκεϝοϱ, § B17, 4; ὀϱνυϝοϱ, § B17, 5; χωννυϝοϱ, § B17, 6), gradation-mates of European Doric -εν and -μεν.

5. It retains *q̆* intact, spelling it *ku* (*ku-iš* = *q*ις, later τις; *ku-uš-ša-an* = *q*οσσον, the later πόσσον, etc., § B11).

6. It has *z* = *ts* (in *-ntsi,* the assibilated form of *-nti;* see § B27) and = *dz* or *dž* (*za - ak - kar* = ζαχαϱ, § B12, 1, and in *-nz-* or *-nž-* from *-ny-;* see § B2, 8); rarely it is used where we should expect *s* or *š*.[5]

7. From the evidence thus far at hand, I am led to believe that, except initially, *ti* was regularly assibilated to *tsi* and this assimilated to (*s*)*si,* except after *n,* where it long remained *tsi* and was written *zi* (§ B2, 6).

7*a*. Thus *ú-wa-da-an-zi* = ϝαδανζι (*OD.,* p. 200, l. 14; p. 213), and frequently; see Hrozný, *SH.,* p. 152, etc. But (after *s*) *nu-us-si* = νοσσι, 'on the homeward journey' (*OD.,* p. 200, l. 14; p. 209), locative of νοστος; and (after vowel) *du-ši* = δοσι(ν), accusative of δοσις, 'gift' (*OD.,* p. 198, l. 14; p. 205).

7*b*. But the *z* (*ts*) of the plural *-ntsi* evidently led to the re-establishment of *z* (*ts*) in the singular, whereby the third singular remained distinguishable from the second singular. That the *z* of *-zi* in verbs is analogical is shown by *e-eš-zi* = ἐσζι (*estsi*),[6] 'is' (§ B14, 2), as contrasted with the noun νοσσι above. Observe also *ti-nu-zi,* 'atones' (Yuzgat, ll. 27, 13, 15), but *ti-nu-ut* = (ἐ)τινυ(τ), 'atoned' (Yuzgat, ll. 8, 20), and *ti-in-nu* = τινυ(ε), 'atone!' See also *SH.,* p. 152, etc.

7*c*. Occasionally (by analogy to middle -ται, -νται, etc.) we find -τι rather than -ζι; thus, *kat-ti* = κουτι, 'protects' (*OD.,* p. 198, l. 3; p. 208); compare *kat-ta* = κουτω, the third singular imperative (*OD.,* p. 198, l. 7); but this -τι is no more the original I-E. *-ti* than *-zi* is. This analogical, or reconstructed, *-ti* appears also in European Doric, not only in the third singular but also in the third plural (Hirt, *Handbuch*^{2}, § 205, A2), where it has long served to confuse grammarians' conceptions of Greek assibilation.

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[4] The question arises whether this phenomenon has any relation to the peculiar Indo-European neuters in which we find final *-r* alternating with medial *-n-*. See Hirt, *Handbuch*^{2}, § 339; also Hrozný, *DO-G.,* LVI, 24 f., and *SH.,* pp. 61 ff.

[5] While it is true that the spelling *z* is sometimes found we should expect *s* or *š* (for example, in the *Song:* *ab-bi-az* = ἀπιος, l. 12; *Aš-za-a-i* = 'Ασαι, l. 15; and *nam-ma-za* = νωμασα, l. 22), the practically consistent use of *z* where we have reason to expect an affricate, as above, justifies us in transliterating such a *z* by ζ.

[6] The familiar ἐστί arose out of such an ἐσζι (*estsi*) by dissimilation of *s-s,* and is not *es* plus original *ti,* as often stated.

7d. Before consonantal *y* we find *š*(*š*) and the *y* is evidently assimilated and perhaps absorbed: *ku-uš-šá-an* = qοσ(σ)ον < **qotyon* (*TG.*, p. 28; also § B11, 4, below), *ku-uš-šá-an* = qοσ(σ)ων < **qotyōn* (*TG.*, pp. 19, 33; also § B12), *uš-ta-áš-sa-an* = ὑστασ(σ)ον < ὑστατιον (§ B17, 5), *ta-ru-ub-bi-eš-ar* = ταϱφισ(σ)ωϱ < **tarphityōn.*

8. A consonantal *y* following an *n* was evidently changed into the affricate *dž* (= *-ge* in English *revenge*) or *dz* (= *-ds* in *ends*); compare ζυγόν = Latin *i̯ugum,* and the *dž* of *juvenile,* Latin *i̯uv̯enilis,* etc. Thus ἀνζο < **an-yod* (§ B20, end), τυϱγανζος < **turyanyos* (§ B2, 5), etc.

9. It generally retains the final dentals -λ, -δ, and -τ (*am-me-el* = ὁμιλ, 'together with,' 'as well as,' 'and,' *S.*, l. 7, *OD.*, p. 202; *ku-id,* the later τι, § B11; *i-ga-it* = ἱϰοιτ, later ἵϰοι, *OD.*, pp. 198 f., l. 27); but these consonants were already yielding, notably in "The Letter of Amenophis" (ἀνζο < **an-yod,* § B20, end; ϰουτω, *L.*, l. 7, spelled *kat-ta, OD.*, p. 208; ὁμιλοι < *ὁμιλεοιτ, *OD.*, pp. 198 f., l. 19; ἐλοι < *ἐλαοιτ, *OD.*, p. 198 f., l. 24).

10. It retains initial antevocalic ϝ (ϝαλϰισ(τ)εϱος, § B16, 5; ϝιεμον, *OD.*, p. 200, l. 11, and p. 211), while medial ϝ was in process of decay ('Ιαϝενε(ς), *S.*, l. 3, *OD.*, pp. 186, 207; λυσϰεϝοϱ, § B17, 4; σ(υ)ϝαος, § B16, 4; but νι(ϝ)αν, *OD.*, p. 201, l. 14; ϰωϱ(ϝ)ωϱ, § B17, 1; ϰαλ(ϝ)ογαθαλος, *OD.*, pp. 198 f., l. 23, and p. 206; δαμετο(ς) < *δᾰϝμος, § B16, 3).

11. There is no trace of original initial or medial *s,* but I have assumed that the status was that of European-Doric *s,* and that it was at the stage *h-* or ʽ initially though not graphically represented.

12. The verbal -ϰε had perfective force, and had not yet developed into a suffix of the perfect. See σαϰε, § B17, 3; λυσϰεϝοϱ, § B17, 4.

B3. When I published my first report on cuneiform Hittite the material that I had at my command was limited. I have since got access to transcripts of numerous Hittite cuneiform texts and find my earlier conclusions fully confirmed. I have not, however, deceived myself into assuming that the careful interpretation of even a considerable number of Hittite texts would soon convince the philological world of the nature of the language. There are various reasons why this should not be expected. It was, therefore, a matter of special gratification to me when I discovered, in the spring of 1915, that Professor Delitzsch of Berlin had edited (in the *Abhandlungen* of the Prussian Academy, 1914) fragments of a set of cuneiform tablets which contain a glossary with Hittite translations of Sumerian and Assyrian words. This fixes the meaning of the Hittite words quite independently of anyone's theory as to the nature of the language. When, then, it appears that these Hittite words have the same form and the same meaning in Greek, the Greek character of Hittite is automatically established. This was not observed by Delitzsch, though it is hard to understand why the obviously Indo-European character of the texts did not impress itself upon him.

B4. The reader must bear in mind that Assyrian and Accadian cuneiform writing is phonetically inexact, and that this feature of cuneiform writing is intensified when the script is employed in writing Greek.[7] Thus—

1. A letter is frequently doubled to no phonological purpose (*ḫa-lu-ga-tal-laš, ḫa-lu-ga-tal-aš, OD.*, p. 206, *L.*, l. 12; *ka-a-aš-ma-at-ta, ka-a-aš-ma-ta, OD.*, p. 207, *L.*, l. 11; *ki-i-kán* and *Aš-za-a-i, OD.*, p. 190).

1*a*. But a vowel sign placed after a syllabic sign ending in that vowel may indicate that the vowel is long; and the doubling of a consonant may indicate accent.

2. Whether doubled or single, a letter may represent any one of a number of similar sounds. For example, *e* or *i* or *ii* or *ie* or *ei* may spell any one of the vowel-sounds ι, ε, η, or ει (thus, *e-eš-šá-i* = ἥσσαει, § B12, 6; *li-il-ḫu-mi-i* = λελχῶμι, *OD.*, p. 201, l. 1; *ku-ut-ti bi-ra-an* = κυτει περαν, § B12, 4, etc.); and *k* may stand for κ, γ, χ, or *q̆*, which last appears as κ, π, or τ in later European Greek (§ B11, below). This lack of exact differentiation is an inheritance from earlier acrophonic pictographic writing (*A.*, p. 20).

3. The nasals *m* and *n* are not always properly distinguished (for example, *an-pa-*[*la*] = ἀμφάλο(ς), *OD.*, p. 190; and syllables like *ma, me,* etc., are expressed by the same signs as *wa, we,* etc. (Arsama, *OD.*, p. 186, σ(υ)ϝες, § B4, 6).

4. In some cases it is still to be determined whether we have to do with inexact spelling or with phonological change, for example, of *m* to *w*.

5. Moreover, there appears to have been no *o* in Assyrian and Accadian, at any rate there was no special cuneiform character to represent it. Foreign *o*-sounds, like Greek ο, ου, ω, were therefore spelled with a character implying one of the nearest vowels, either *a* or *u* (§ C12).

6. What appear to be epenthetic vowels (usually spelled *a* or *u*, the latter especially before a labial) are more frequent in some texts than in others and may be the graphic representation of sounds appearing only in the slow and abnormally distinct utterance that is likely to arise when one is articulating (actually or only mentally) in the process of writing. For example, ἁπ(α)τορ = European-Greek ἅπτεν or ἅπτειν (§ B17, 1), ταρ(υ)φϝορ (§ B18), πυν(υ)σ(υ)ϝορ (§ B17, 2*a*), σ(υ)ϝαον (§ B16, 4), σ(υ)ϝες (erroneously transliterated *su-me-es* [§ B4, 3] by Hrozný, *SH.*,

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[7] [A more extended treatment appears in §§ C3–C20.—F. A.]

pp. 116 ff.), σ(υ)ϝιλ (transliterated *su-me-el* by Hrozný, *SH.*, p. 115); for the two last, see Brugmann, Vol. II, Part 2, pp. 385 f.

7. The second half of a diphthong may be written with the appropriate vowel or it may be left unrepresented, much as it might later be written subscript. For example, in lines 23–24 of "The Letter of Amenophis" (*OD.*, pp. 198–99), *a-ku-iš tu* spells ἀγοις τυ (= ἄγοις σύ, 'you may send'), but is followed by *el-u* = ἐλοι/ἐλῷ, 'may he drive away'; and *ub-bi-is-ta-du* (in line 25) = ὑφιστα(ι) το, 'may it support,' is followed (in line 27) by *i-ga-it* = ἰϰοιτ/ἶϰοι, 'may they come.'

B**5.** It must also be borne in mind that this Hittite Greek is many hundreds of years older than classical Greek; that it is of the Doric, not the Attic, variety; that it is Hittite Doric, not European Doric (§ A20, end); and, it is hardly necessary to add, that we cannot expect that the endings of these Hittite-Greek words will always coincide with the endings of the corresponding words in other Greek, any more than they always coincide in later Greek dialects; or that the words will always have exactly the same shade of meaning.

B**6.** I shall here content myself with citing a few typical examples of each of the various parts of speech. The English translations that I give of the Hittite words represent the Sumerian and Assyrian words to which the Hittite words are attached in the Trilingual Glossary. The pronoun and pronominal adverbs (§ B11) are in themselves sufficient to show the Greek character of Hittite.

B**7.** We have already observed (§ B1, 4) the Hittite use of the Doric datives of the personal pronoun, but in Hittite Doric these forms have the function of (postpositive) possessive adjectives. Compare German *Ich wasche mir die Hände,* 'I'm washing my hands,' also English *Now, look me in the eye,* and *He was staring her in the face.*

European Doric	Hittite Doric
ἐ-μιν, 'for me'	μι(ν), 'mine,' 'my'
τιν, 'for thee'	τι(ν), 'thine,' 'thy'
ϝιν, 'for him'	σι(ν), 'his'

B**8.** But Delitzsch (so, too, Hrozný, *SH.*, pp. 123 ff.) is in error in supposing that μι, etc., are datives of a possessive suffix, and that μιν, etc., are accusatives. The true status of these words I made clear long ago (*OD.*, p. 209). From Hrozný's presentation (as from that of Delitzsch) one might get the impression that the nominative masculine singular of such possessive adjectives regularly ended in -ς, and the accusative in -ν. As a matter of fact, such a μις appears to be found but once—

Nominatives: *ḫa-lu-ga-tal-aš mi-š, ḫa-lu-ga-tal-laš* (before a vowel, *L.*,

l. 23), *ḫa-lu-ga-tal-la-a t-ti-in* (before a vowel, *L.*, l. 19), *al-ḫiš mi* (before a consonant, *L.*, l. 13).

Accusatives: *ḫa-lu-ga-tal-la-an mi-in* (before a vowel, *L.*, l. 12), *ḫa-lu-ga-tal-la-an* (before a vowel, *L.*, l. 20), *ka-a-aš-ma-at-ta* (before ϝ, *L.*, l. 11).

Hrozný, however, appears (*SH.*, p. 132) also to have found a nominative masculine *sis* (*ši-iš*), 'his,' as well as the neuters *mid* (*SH.*, p. 125) and *sid* (*si-id* and *še-id*) (*SH.*, p. 132).

B**9**. These forms (μις/σις and μιδ/σιδ) evidently represent the analogical adoption of adjectival inflection brought about by the apparently accusative suffix -ν of the Doric dative forms μι(ν), τι(ν), σι(ν), this -ν often disappearing phonetically before a following initial consonant (§ B2, 3). Hrozný, however, regards the analogical μις as an original nominative form and asks if it may not have arisen out of **mei̯iš* (= *mei* + *iš*?), as Latin *meus* arose out of **mei̯os*.

B**10**. In fact, the only singular pronominal accusatives in Amenophis' Letter are *mi* = με (l. 3) and *du-u* = τυ (l. 7), the latter being a nominative form used, as in some European Doric, as an accusative. This τυ also occurs in the Letter (l. 24) as a nominative, with the spelling *tu*. Observe also *ad du-s* (l. 27) = ἀ(δ) τ(ε)ους or ἀ(δ) τ(ε)υς, 'to you,' with regular loss (§1, 5) of the pretonic ε. This use of the genitive with ἀδ surprises one.

B**11**. There are numerous examples of the *q*-pronouns and adverbs.

1. *ku-iš* (*TG.*, p. 33) = *qis, 'who,'* the later τις, 'who'; see § B20, end.

2. *ku-id* (*TG.*, p. 33) = *qid*, 'how?', 'when?', the later τί, 'how?'

3. *nu-ku-id* (*TG.*, p. 33) = νυ *qιδ*, 'why?', 'for what time?', 'whenever,' the later τί νυ, 'why (now)?'

4. *ku-uš-ša-an* (*TG.*, p. 28) = *qoσ*(σ)ον, 'when?' the neuter of *qoσ*(σ)ος, the later πόσ(σ)ος, cf. πόσον τινὰ χρόνον, 'how long.'

5. Also *nu ku-uš-šá-an* (*TG.*, p. 28) = νυ *qoσ*σον, 'for what time?,' 'whenever,' 'as long as,' that is, used relatively, like European-Greek ὅσον, 'as long as.'

6. With these *nu*-forms compare *ki-nu-un* (*TG.*, p. 27) = γε νυν, 'now,' Attic ἄγε νῦν, 'well now,' 'now,' the γε for ἄγε betraying the Doric accent (ἀ)γέ, because of the loss of unaccented initial ἀ- (§ B1, 5).

B**12**. As Delitzsch observed (*TG.*, p. 33), there is also a noun spelled *ku-uš-šá-ni* = *qoσ*(σ)ων, dative *ku-uš-šá-ni* = *qoσ*(σ)ονι, which the Glossary tells us means 'pay,' 'compensation.' This *qoσσ*ων (< **qotyōn*) is an *n*-extension of a *ti*-stem parallel with **qiti-*, whence the later τίσις, 'pay,' 'compensation,' 'retribution.' In later Greek, *qoσ*(σ)ων would be ποσ(σ)ον. For its ο, compare ποινή (< **qonia*), 'retribution,' 'quit-money.' — Of other nouns, I may cite the following:—

1. *za-ak-kar* (*TG.*, p. 28), 'storm' = ζαχαϱ; compare ζαχϱηής, 'stormy,' 'violent,' and Homer's ἔ-χϱαον, Latin *in-gruo*, etc. The occurrence of this ζ = *dz* or *dž* < *dy* in Hittite Doric ought to end its designation as an Aeolism (Hirt, *Handbuch*^{2}, § 53, 4).

2. *chu-u-ma-an* (*T.G.*, p. 21), 'entirety' = κομων. Compare κομιδῇ, 'entirely.'

3. *pa-bar-ri* (*TG.*, p. 15, 2), 'produce' = παφφοϱι(ς) < *παμφοϱις. Compare παμφοϱία, 'all kinds of fruit.' For φφ < μφ, compare Cretan ἀφφάνω for ἀμφάνω and Doric-Hittite *Lab-ba-ia* = Λαππαιο(ς) for Λαμπαῖος (*OD.*, pp. 186, 191).

4. *ku-ut-ti bi-ra-an* (*TG.*, p. 20, 33), 'circumference of a dish' (Sayce) = κυτει πεϱαν, literally, 'around a dish,' which would be κύτει πέϱι in other Greek; see § B14.

5. *tu-ri-ia-an-za* (*TG.*, p. 19, 12), 'prominent,' 'what juts out,' 'outstanding' = τυϱyανζος, the same word as τύϱαννος, 'absolute sovereign,' especially one who rose to power by irregular means; compare English *upstart*. For ζ < *y* after ν, see § B2, 8. The *ry-ny* < *rw-ny* (compare Sanskrit *turvanih*, 'siegreich vordringend') is a case of telemimesis.

6. The Hittite translations of nouns are not always word for word; and for this we have reason to be thankful. Thus, Sumerian *a-giš-gar-ra*, Accadian *iš*(?)*-ga-gar*, 'restraint,' 'that which restrains,' is rendered by the interesting clause *UD. KAM-áš a-ni-ia-an ku-iš e-eš-šá-i* (*TG.*, p. 19, 18). In this, *UD. KAM* is the ideogram for 'daily,' and *-áš* is a phonetic complement (*CH.*, § 10) spelling the last syllable of ἡμεϱαν πϱος (= πϱὸς ἡμέϱαν = 'daily'), the rest of the clause being *a-ni-ia-an ku-iš e-eš-šá-i:* that is, ἡμεϱαν πϱος ἀνιαν *q*ις ἡσσα(ε)ι = τις πϱὸς ἡμέϱαν ἀνιαν ἡσσᾷ, 'who overcomes the annoyances of every day life,' that is, 'one who restrains himself.' For ἀνια see also § C12*c*. ἡσσαει is the new active of ἡσσάομαι, Attic ἡττάομαι, 'be overcome.' For *-i* spelling -ει, see § B4, 2. Observe the position of the relative.

B13. To these nouns I may add a proper name, partly for its own sake and partly for the sake of the words with which it is used. Delitzsch (*TG.*, p. 31) states that in one text there is found attached to the end of the various divisions a brief sentence beginning with a masculine proper name followed in each case by the two words *bi-ra-an e-eš-ži*.

B14. The first of these is—

^{m}I-ia-ra-si-ia-áš bi-ra-an e-eš-zi.

1. *bi-ra-an* = πεϱαν, 'around,' 'through' (§ B12, 4), whence πεϱαίνω, 'bring to an end,' 'finish,' 'accomplish.'

2. *e-eš-zi* = ἔσζι, that is, *estsi*, with *-ti* assibilated to *-tsi*, the later ἐστί being due to teleterosis of *s-s* at a time when *ts* had not yet passed into *s*.

For assibilation in Hittite Doric, see § B2, 7, 7*a*, 7*b*. Compare also *e-eš-mi*, § B15.

3. περαν ἐσζι = English 'he is through,' German *er is* (*damit*) *durch*, 'he has finished,' expressing the idea usually expressed by the derivative verb περαίνω, namely, 'finish,' *'vollenden.'*

4. *I-ia-ra-ši-ia-áš* spells Doric Ἱαροσιος, Attic Ἱερόθεος. For σ = ϑ see § B1, 3. We are not surprised to find ιο for εο in a Doric text (Thumb, *GD.*, § 92, 2; Buck, *GD.*, § 9, 4 ff.). The same is true of the α for ε in Ἱαρο- (as also in ταρ(υ)φϝορ = τραφεν, Doric for τρέφειν, § B18), Buck, *GD.*, § 13. With this name, compare *Ir-ša-ap-pa* (in *L.*, l. 11) = Ἱρσαβον, accusative of *Ir-ša-ap-pa* (l. 29) = Ἱρσαβος, Attic Ἱερόσαβος, literally, 'priest of Sabos'; compare Ἱεροβάαλ, etc. For (-ν) and (-ς), see § B2, 2 and 3. The usual Doric form of ἱερός was ἱαρος (see above), and such a form may have been the basis of ἱρός of the Hittite Doric Amenophis' Letter (with regular loss of the pretonic vowel) and thus may be reflected in the Ἱρ- of our Ἱρ-σαβος. Still, we may have to do with the same form that produced Ionic ἱρός, Lesbian ἶρος; Buck, *Greek Dialects,* p. 13, § 1. That we have Ἱρ- rather than Ἱρο- (compare Ἱαρο- in Ἱαροσιος, above) is due to the fact that the Doric compound would be accented Ἱροσάβος (§ B1, 1) and the pretonic *o* might normally disappear (§ B1, 5).

5. In ordinary Greek letters we have, then—

Ἱαροσιος περαν ἐσζι
'Hiarosios (or Hierotheos) stopped (here),' or
'Hiarosios wrote thus far.'

B15. The first paragraph on the reverse of the Yuzgat Tablet[8] ends with the words:

Ú-ug-ga SAL An-na-an-na-aš e-eš-mi.

As this is preceded by a verb with the ending of the third person plural—*anzi* (§ B2, 7*a*)—it is clear that our four words constitute a complete sentence. Hrozný (*DO-G.*, § 56, 3 *f.*) observed that the initial word must be the Hittite word for "I" and be somehow related to ἐγών, Latin *egō,* though the phonology was not clear. *ú-u* might spell *u* or *o*, and *a* may spell *a* or *o* (§ B4, 5).[9] This pronoun is followed by the ideogram for 'woman,' which Sayce and Pinches interpreted as a determinative of the following name, reading 'the woman Annannas.' As this name has the form of a feminine genitive, and as determinatives are sometimes omitted in provincial texts like the Hittite, I believe that our ideogram does not function as a determinative but represents the word for 'woman' and that we should read 'the woman of.' But the following name may read *O(i)no(u)nas* (§ B4, 5 and 7) as well as *Annannas* and be the genitive of a Doric form corresponding to the Οἰνουνία recorded as found in Parthyene. If this is right, we should read 'the woman of Oenoun(i)a.' As the text deals with propitiatory sacrifices to various deities, we must understand 'woman' in the sense of 'priestess.' The last word in the sentence, as observed by Hrozný (*DO-G.*, § 56, 33), clearly is Indo-European *es-mi,* later Greek εἰμί, 'I am.' Compare *e-eš-zi,* § B14. Our sentence would then be 'I am the priestess of Oenouna.'

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[8] Sayce and Pinches, *The Tablet from Yuzgat.*

[9] One is tempted to suggest that we may here have a case of gradation, with *o*- for the *e*- of the familiar ἐγών; compare the *o* of the Hittite-Doric infinitive ending -ορ/-ϝορ from -ον/-ϝον for European-Doric -εν/μεν, § B2, 4.

B**16.** Of the adjectives I may mention the following:

1. *a-a-ra* (*TG.,* p. 24) = ἀϱο(ς), 'good,' of which Greek ἄϱιστος, 'best,' is the superlative.

2. *me-ik-ki* and *me-ik-kå-a-es* (*TG.,* p. 29) = μεγις, μεγας, 'large,' 'great,' 'much.'

3. *da-me-e-da* (*TG.,* p. 29) = δαμετο(ς), 'fat,' an extension of the stem seen in Javonian Greek δημός, 'fat,' from *δᾱϝμος.

4. *šú-u-wa-an* (*TG.,* p. 15) spells the neuter either of σ(υ)ϝαος, 'strong,' the later σάος, σῶς, 'safe and sound,' 'in healthy condition,' from **twawos,* or of its doublet σϝοος, later (ψυχο)σσόος < **twowos.* For the meaning 'strong,' compare Sanskrit *taviṣaḥ,* 'strong.'

5. *wa-al-ki-iš-šá-ra-áš* (*TG.,* p. 19) = ϝαλϰισ(τ)εϱος, 'strong,' a doublet of Greek (ϝ)αλϰιμος, 'strong.' For (τ), see § B2, 1. The ϝ- compels us to abandon the association of Greek ἄλϰιμος with Old-English (*e*)*alh,* 'temple,' and to connect it with Sanskrit *várcaḥ,* 'vigor' (Walde, under *Volcanus*). Doric-Hittite ϝαλϰισ(τ)εϱος was evidently originally a comparative-superlative absolute, with the meaning 'very strong.' And it would appear that Greek ἄλϰιμος, too, was originally such a superlative in *-ṃo.* The -ιμος would be normal Doric Hittite, as I shall show in my forthcoming *Hittite Greek.* In other Greek we should expect -αμος; but an *ἄλϰαμος might readily become ἄλϰιμος under the influence of ἀλϰί, 'with strength.'[10]

B**17.** The many verbs[11] present numerous points of interest:

1. *ap-pa-tar* (*TG.,* p. 21, 41, and 28, 11), 'grasp,' 'take,' 'get' = ἀπ(α)τοϱ < ἄπτον, the mate (§ B2, 4) of European-Greek ἄπτεν, ἄπτειν, 'fasten to,' 'grasp,' etc. Accadian *za-ra-rum,* 'beget,' is rendered by Hittite *ku-ru-ur ap-pa-tar* (*TG.,* p. 29, 4) = ϰωϱωϱ ἀπ(α)τοϱ, that is, European-

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[10] Compare English *a new-milks cow* for *a new-milch cow,* with *-lcs* for *-ltš* by analogy to the *-lc* in *milk.*

[11] For the morphology of the verb, see Hrozný's excellent chapter (*SH.,* pp. 153–79).

Doric ϰωϱων ἄπτεν, Attic ϰόϱων ἅπτειν, literally, 'get children,' with -ϱ for -ν (§ B2, 3) in both words. For α see § B4, 6. Hrozný (*SH.*, p. 170) erroneously associates ἄπ(α)τοϱ with Latin *apiscor.*

2a. Prehistoric πυνϑω, 'ask,' the original form of πυνϑάνομαι, 'learn,' is reflected in Hittite *bu-nu-uš-šú-u-wa-ar* (*TG.*, p. 27, Z, 11), the translation of Accadian *ša'âlu,* 'ask.' This *bu-nu-uš-šú-u-wa-ar* is the clumsy cuneiform spelling of Hittite-Doric πυν(υ)σ(υ)ϝοϱ < *πυνϑμον, with Laconian-Doric σ for ϑ (§ B1, 3), and Hittite-Doric ϝοϱ for -μον/-μεν (§ B2, 4).

2b. The parallel *bu-nu-uš-ki-u-wa-ar* (*TG.*, p. 27, Z, 12) = πυν(υ)σϰεϝοϱ, which is used to translate *šita'alu,* the iphteal form of the Accadian word, is evidently a perfective ϰ-aorist, out of which the Greek ϰ-perfect developed. This would appear to betray the (original) perfective character of iphteal forms. In other words, Accadian *šita'alu* and Hittite πυν(υ)σϰι(υ)ϝοϱ meant 'succeed in inquiring,' 'learn,' the idea expressed in later Greek by the middle πυνϑάνομαι. The Greek perfective -ϰε, which later became the most common characteristic of the perfect, was evidently originally a postpositive particle,[12] which, as can still be traced in European Greek, attached itself first to forms ending in a vowel. Thus,[13] ἕστη-ϰε (with ἑστη- = Sanskrit *tasthấu*) by the side of ἕστα-μεν, later ἑστή-ϰα-μεν. This postpositive Greek[14] particle was identical with the Germanic prepositive particle that appears as the Germanic perfective prefix *ga-/ge-/gi-.*[15] Thus Old-English *ge-āscian,* 'learn by inquiry,' has exactly the same relation to *āscian,* 'ask,' that Hittite πυν(υ)σϰεϝοϱ, 'learn,' had to πυν(υ)σ(υ)ϝοϱ, 'ask.' The cognate Latin *co(n)-* has perfective force in some

[12] That -ϰι/-ϰε was some sort of derivative verbal suffix did not escape Delitzsch (*TG.*, p. 38, *b*).

[13] Hirt, *Handbuch*^{2}, § 471.

[14] Also Etruscan, for example, *lupuce,* E., § 10.

[15] We should expect *ha-,* earlier *χa* (*IE.*, *co-*), the normal stressed form, and *ge/gi* (earlier *ʒe/ʒi*), the normal voiced unstressed forms. But the voiceless fricative of the stressed form yielded to the voiced fricative that arose in unstressed positions. Compare the exactly parallel process in English. In older English initial and final fricatives were voiceless in monosyllables such as *is, his, has, as, of, with, they, their, there,* etc., as well as in *hiss, lass, path, thick,* etc. But when such words were often unstressed, the voiceless fricative was likely to become voiced. Thus, in late Middle English there arose, by the side of the stressed forms *is, his, has, as, of, with,* etc., the weak forms *iz,* (*h*)*iz,* (*h*)*əz, əz, əv,* etc. And so in reply to "I don't know whether he has (=.əz) done it or not," one might say a hundred years ago (and even now in Scotland), "He has" (=.hi .hæs, not .hæz), employing the weak form when unstressed, and the stressed form when stressed. But in most of the English-speaking territory the *-z* of the unstressed form is now used even when stressed, and so we say, "Yes, he has" (=.(h)i .hæz), retaining, however, the vowel of the stressed form. This *hæz* thus corresponds exactly to *ga-.*

words, like *confuto,* 'check,' 'repress,' 'silence,' from *futo,* 'strike,' 'pound'; *confugio,* 'take refuge in, or with,' from *fugio,* 'flee'; *confodio,* 'strike down by stabbing,' from *fodio,* 'prick,' 'stab (at),' 'wound by stabbing'; etc. But it more often has the meanings (*a*) 'with,' 'together with,' (*b*) 'together,' 'all together,' 'intensely,' 'completely'; compare English *altogether,* 'completely' as modifier of an adjective. The meaning (*b*) was the source of (*c*) that of 'successfully,' whence the perfective force. So with συν- in Greek.

3. *šá-*[*ak-*]*ki* (*TG.,* p. 9, 7, see § B21, end), 'knows' = σακε **σακε**, doublet of ϑακε (with Laconian-Doric σ for ϑ, § B3 (compare Laconian ἔσαμεν), the active perfective form (§ B2, 12) of ϑ(ε)αω, ϑ(ε)αομαι, 'gaze at'; with the normal perfective value, 'succeed in seeing,' 'realize,' 'understand,' 'know.' Hitherto the active of this verb has been found in Laconian only (§ B1, 3*a*). Compare the like development of Greek οἶδα, English *wot,* German *weiss.*

4. *ta-at-ta lu-uš-ki-u-wa-ar* (*TG.,* p. 27, Z, 19) is used to translate Accadian *be-du-ú/pidú,* 'loosen,' 'ransom.' Of these words, *ta-at-ta,* the object, may be Greek τατά (τείνω), 'things that can be stretched.' *lu-uš-ki-u-wa-ar* = λυσκεϝοϱ is the infinitive (§ B2, 4) of the κ-perfective (§ B2, 12) of *λυσω (Gothic *lausjan,* 'release,' 'ransom'), the mate of the familiar λύω, 'loose,' 'relax,' 'set free.' But *ta-at-ta* may as well spell τατο(ν) (§§ B2, 3, and B4, 5), 'stretched,' 'racked,' and the two words may mean 'release one from the rack.'

5. Accadian *uz-zu-zu* (*TG.,* p. 27, Z, 13), 'be excited,' 'be angry,' is translated by Hittite *uš-ta-áš-šá-an ar-nu-war* = ὑστασσον ὀϱνυϝοϱ, 'be extremely excited.' ὑστασσον is the assibilated (§ B2, 7*d*) form of Homeric ὑστάτιον, for the usual ὕστατον; cf. εἰς τὸ ὕστατον, 'extremely.' With Hittite ὀϱν(υ)ϝοϱ, 'be excited,' compare European-Greek ὄϱνυμι, 'rouse,' 'excite,' 'be excited.' For (υ) see § B4, 6; for -ϝοϱ < -μον, § B4, 6.

6. Accadian *ma-lu-ú* (*TG.,* p. 23, 51), 'befull,' 'fill,' is translated by Hittite *ku-un-nu-war* = χωννυϝοϱ; compare European-Greek χωννυω, 'throw up,' 'heap up,' 'cover,' 'fill.' For -ϝοϱ, see § B2, 4.

7. These illustrations of the infinitive in -οϱ or -ϝοϱ (§ B2, 4) may suffice.[16] But I should say that, as observed by Delitzsch (*TG.,* p. 36), an infinitive, being a verbal noun, often occurs where we might use a verbal noun in *-ing,* or even an ordinary noun. Thus, ἀϱχϝοϱ (§ B21) means 'to command,' 'commanding,' 'a command,' 'commands.'

B**18.** The adverb-preposition *anda*[17] occurs in various paraphrases that make it clear that it means 'together,' 'with,' 'because of.' This *an-da*[18] = ἀντα and is the same as European-Greek ἄντα, 'against,' 'face to face,' and shows the same shift in signification that our *with* underwent in passing from the meaning 'against' (still retained in *withstand,* 'resist') to that of Latin *cum.*[19] Observe Old-English *wiþ* and *wiþer,* 'facing,' 'against' (German *wider,* 'against'), and *wiþ-þæm-þe,* 'in consideration of,' 'because of.' For example, *an-da ta-ru-ub-bu-(u-)ar* (*TG.,* p. 22, 52, p. 23, 49, p. 18, 5) = ἀντα ταϱυφ-ϝοϱ, 'collect together,' of which the latter word is a metathesized form of European-Doric τϱαφ-εν (= τϱέφειν, § B14, 4), 'curdle,' 'coagulate,' that is, 'collect into lumps.' Compare German *ge-rinnen,* 'curdle,' literally, 'run together,' and Latin *coagulum;* also Greek ϑϱόμβος, 'curd.'

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[16] More may now be found in Hrozný, *SH.*

[17] Erroneously identified by Hrozný (*SH.,* p. 17, n. 4, etc.), with Latin *endo* and translated 'in.'

1. The meaning 'collect together' makes it clear how τϱέφα got the meaning 'curdle.' The abstract noun *ta-ru-ub-bi-eš-šar* (*TG.,* p. 21, 21 f.) = '*nap-cha-ru,*' '*Gesamtheit*' (*TG.,* p. 45), seems to be ταϱ(υ)φισ(σ)ωϱ < *ταϱφιτιων, with the ending *-ityon* so common in Latin.

2. Compare also the rendering of Accadian *a-šá-šum* and *zi-tum,* 'mourning,' 'lamentation,' by Hittite *an-da gá*(*n*) *im-pa-u-wa-ar* (*TG.,* p. 23, 53) and by *pa-ra-a gán pa-a-u-ar* (*TG.,* p. 12, 6), which, it is easy to see, mean 'to be agitated with grief.' Both *an-da*/ἀντα (§ B18) and *pa-ra-a*/παϱα, like European-Greek παϱά, mean 'with,' 'because of.' *gán*/γόον is the accusative of γόος, 'grief,' 'lamentation.' And *pa-a-u-ar, im-pa-u-wa-ar* (compare τϱόμος and ἔντϱομος, 'trembling') are cognate with Latin *pau̯eo,* 'tremble with grief,' 'be agitated.'

B19. The usual negative in the Hittite cuneiform texts is the Assyrian-Accadian *ú-ul,* 'not.' It is likely that the use of this Accadian word was graphic only, much as the Old-English scribes generally used 7 as we sometimes use & and (in mathematics) +, all three of which are but corruptions of a cursive form of Latin *et,* 'and.' — The rare negative *na-at-ta* (*TG.,* p. 36, 16) is probably real Hittite; the first part of it may be identical with European-Greek μή/μᾱ, 'not,' but the second part cannot be related to the -τε of μήτε, as I suggested in the first edition of this paper, for this -τε is from *qe. Possibly, however, *na-at-ta* corresponds to European-Doric ματαν, 'to no purpose, 'idly,' 'fruitlessly,' which in Hittite Doric may have passed completely over to the meaning 'not' by confusion with μα/μή, 'not.' See also Hrozný, *SH.*, p. 184.

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[18] In Amenophis' Letter (*OD.,* pp. 198 f., § 18) ἀντα is best rendered 'on,' but its more exact meaning is 'in view of,' 'in consideration of,' 'for.' Compare our use of the word *against* (vulgar *ag'in*) in the sense of 'in anticipation of,' 'in preparation for': *lay something by, against a rainy day.* In line 25 of the Letter, ἀντα is used adverbially = 'against them' (*OD.,* pp. 198 f., § 18), and is spelled *an-tu.*

[19] The shift of meaning from 'contra' to 'cum' in English *with* and Greek ἀντα must have begun in verbs like Old-English *feohtan wiþ,* 'contend against,' 'strive with,' in which those engaged may be regarded as antagonists but also equally well as participants in the common action. See also Waldo under *com-, cum, contra.*

B20. It must be understood that the exact form and meaning of a goodly number of Sumerian and Accadian words in these texts are unknown,[20] or, at least, were not made out by Delitzsch. For example, in the first two lines dealt with by Delitzsch (*TG.*, p. 9, 2 and 3) he reads the Accadian text as—

šá-ni-nam la-a i-šú-u
šá-ni-nam la-a i-du-u

and translates—

'has not a rival,'
'knows not a rival.'

This was very natural. In fact, *ša-ni-na la i-šu-u*, 'has not a rival,' is one of the epithets added to the list of the titles of Sargon II. As lines 4 and 6 begin with *šá*, 'who,' Delitzsch believed that this relative pronoun had been accidentally omitted before the homophonous first syllable of *šá-ni-nam*, also a very natural assumption. But the text is all right as it stands, reading—

šá ni-nam la-a i-šú-u,
šá ni-nam la-a i-du-u.

That is—

'who has not anything,' or 'who has nothing,'
'who knows not anything,' or 'who doesn't know anything.'

For ***ni-nam*** is obviously a variant (originally pre-vocalic?) of *minma* or *mimma*, the Assyrian-Accadian word for 'anything.' Thus the Accadian rendering corresponds exactly to the Sumerian *gi nu tug*, 'who has nothing,' and *gi nu zu*, 'who knows nothing.' The corresponding Hittite text is defective, reading—

a-a-an-za ku-iš . . . .
a-a-an-za ku-iš u . . . .

That is—

ἀνζο *q*ις [ἔχει], 'who has nothing,'
ἀνζο *q*ις ϝ[οιδε], 'who knows nothing.'

For ἀνζο is a negative indefinite pronoun, made up of ἀν, 'not,' and ζο < *yo*, the usual Greek ὅ, 'what,' neuter of ὅς, but here used indefinitely; compare τι, 'what,' anything,' and οὔτι, 'nothing.' For ζ- < *y*, see § B2, 8; for loss of *-d*, § B2, 9; for *q*ις, § B11.

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[20] Delitzsch, *TG.*, p. 4.

B21. In the succeeding lines (*TG.*, p. 9, 4–5, 6–7) Delitzsch mistook the Accadian *ur-tám* for the similar[21] *ir-tám,* and, with extreme reserve,[22] suggested the readings—

šá te-ir-tám ir-tám la-a i-šú-u,
'who has not a held-back breast,'

and

šá te-ir-tám ir-tám la-a i-du-u,
'who knows not a held-back breast.'

By 'a held-back breast' Delitzsch understands 'retardation' or 'opposition.' But the correct readings evidently are—

šá te-ir-tám ur-tám la-a i-šú-u,
'who does not hold command,'

and

šá te-ir-tám ur-tám la-a i-du-u,
'who knows not commands' =
'who does not obey commands.'

This corresponds exactly to the Sumerian—

šú-gar nu tug, 'who has not authority,'
šú-gar nu zu, 'who does not know' (that is,
recognize) authority';

as also to the Hittite—

ku-iš ar-ku-u-wa-ar na-at-ta i-ia-zi,
'who does not issue commands,'

and

ku-iš ar-ku-u-wa-ar na-at-ta šá-[*ak-*]*ki,*
'who does not know commands,' that is,
'who does not recognize, or heed, commands.'

ar-ku-u-wa-ar is ἀϱχ-ϝοϱ = European-Greek ἄϱχειν, § B17, 7. For *na-at-ta,* see § B19, end. *i-ia-zi* (also Yuzgat, reverse, 39) = ἱαζι (in place of ἱηζι < ἱητι, Attic ἵησι) is a new third singular formed from the third plural *i-ia-an-zi* (Yuzgat, obverse, 7) = ἱανζι, Attic ἱᾶσι < ἱαντι. For -ζι, see § B2, 7; for *ša-*[*ak-*]*ki,* see § B17, 3.

B22. I should here state that the top line of our tablet is worn off, which explains why the text begins with line 2. The missing first line evidently contained some Sumerian word after the determinative *lù,* 'man,' 'person.' For, in its place, the following lines (our 2, 3, 4, 6) have the cuneiform ditto sign. Delitzsch suggested that this might possibly mean 'breast,' whence his peculiar renderings of the lines. Fortunately, the question is solved by the circumstance that we find in lines 5 and 7 the antecedent of *ku-iš,* that is, the Hittite translation of the Sumerian word that is dittoed in lines 2, 3, 4, 6. This is *ut-ta-ni-i-za* = οὐδανιζο(ς) < *οὐδανιγος < *οὐδαμνιος < *οὐδαμινος, 'good for nothing,' 'worthless.' In other words, we have to do with four particular kinds of good-for-nothings: the man who owns nothing, the man who knows nothing, the man who holds no position of authority, and the man who is unwilling to obey the orders of those in authority.

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[21] As will be seen from page 48 of the Trilingual Glossary, in the script of this text the upper horizontal wedge of *ir* is made to cross the right-hand perpendicular wedge in a way that causes it to resemble the upper horizontal wedge of *ur,* and thus could readily lead to the confusion of the two characters.

[22] "mit äusserstem Vorbehalt."

B**23.** Before we can determine the meaning of the Hittite words from the corresponding Sumerian and Accadian words, we must know what the Sumerian and Accadian words mean. In fact, I do not hesitate to predict[23] that in not a few cases the meaning of the Hittite word will be determined first by the aid of the usual Greek form, and that the meaning of the Sumerian and Assyrian words will be determined by that of the Hittite. For example, in the light of what we have seen above, it is clear that *ku-id ma-an* (*TG.,* p. 27, Z, 17) is *q*ιδ μαν, later Doric τι μαν, Attic τί μήν, 'what then?', 'what of it?' This thus gives us the meaning of the corresponding Accadian *a-ru,* which may be a variant of *allu,* 'then.' In a paper in the *Journal of the Royal Asiatic Society,* Sayce succeeded in identifying some of the Sumerian and Accadian words with more success than that which Delitzsch achieved.

B**24.** The discovery that the Hittites were Greeks will, of course, have far-reaching results. But what seems to me at present hardly less important is the fortunate accident that has put into our hands texts that furnish evidence as to the nature of the language such as even the most timid conservative must recognize. For we are thus saved in the case of Hittite the delay and the various unpleasantnesses that are prone to mar the transition from the entertainment of erroneous traditional conceptions to the acceptance of unexpected truth.

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[23] I overlooked the fact that Delitzsch had (*TG.,* pp. 38 f.), in a measure, anticipated me in this.

C. CUNEIFORM HITTITE

EDITORIAL NOTE

[Under the title, "The Old Doric of the Tell el Amarna Texts" (*Transactions of the American Philological Association* (1913), XL, 185–214), Dr. Hempl published a transcription of the famous letter from Amenophis III to Tarcondorous, together with a translation of the entire letter and an interpretation of lines 11–16. On page 190 of that study he also interpreted lines 14–15 of the so-called "Shorter Letter," which he refers to as the "Song of Lappaius." In a manuscript designated "Pictographic and Cuneiform Hittite," I found materials for a complete interpretation of both these texts, the commentary on the Letter being practically completed except for a large number of missing references. This is the book which Dr. Hempl intended to publish with the title "Hittite Greek." Only about one-fifth of the entire work is reproduced here, the rest being either too fragmentary, or too similar to others of the *Mediterranean Studies*.

The "Notes on the Text" (§ 21) have been considerably abridged, but without omitting anything essential.

For the Abbreviations, see the "General List of Abbreviations and Works Consulted," page 6, above. Here *L.* = "The Letter of Amenophis III." *S.* = "The Song of Lappaios."—F. A.]

THE LETTER OF KING AMENOPHIS III OF EGYPT TO KING TARCONDOROUS OF ARSAMA

C1. To one unfamiliar with the correspondence that passed between oriental monarchs in the fourteenth century before Christ, the letter of Amenophis may at first appear strange, and the reader may even be led to smile at the specification of what present would be welcome. This was, however, in accordance with the custom of the time. Moreover, the scholar who has waded through the formless letters of the Kussite kings of Assyria and been bored by their begging, their whimpering, and their exhibitions of petty jealousy cannot but be struck by the direct and manly tone of the Egyptian king's letter, his expression of sympathy for the parents about to send their daughter into a distant land, his account of the provision he has made for her safety on the way, and the poetic but dignified touches that he gives to his communication as a whole. No mean epistle this, the most ancient Greek letter to come down to us. It will be observed that the letter proper falls into three parts: the first (lines 11–16) dealing briefly with business; the second (lines 17–21) an anticipation of what will take place in Arsama when the day of departure arrives; and the third (lines 22–26) devoted to the journey to the south, through the mountains of Syria and over the desert sands of Sinai. The concluding lines (27–29) are introductory to the list of presents.

C2. My text of the Letter is based on that of Knudtzon[1] and on Winckler's transcription.[2] As most cuneiform characters have more than one phonetic value, Knudtzon could not always know which one was to be taken, but he generally hit it right. Where I deviate from his text I shall say so; see the footnotes.

CUNEIFORM WRITING

C3. What we call cuneiform (that is, wedge-shaped) writing is a peculiar development of the early pictographic writing of the Sumerians, a people of high civilization who dwelt in Mesopotamia five thousand years before Christ. The lines making up the earlier pictograms acquired a triangular head, due to the shape and slant of the stylus employed in inscribing on the tablets and cakes of soft unbaked clay. The characters were originally arranged in perpendicular columns, as in Chinese writing, but it was early discovered that the script could be more easily read if the tablet was tilted over to the left so that the eye could traverse it horizontally, whereby the columns became lines, and the pictograms assumed a reclining posture. Moreover, this peculiar position, together with the wedge-like shape of the strokes with which they were drawn, caused them to lose their pictographic character more quickly and radically than the pictograms of other systems.

Cuneiform writing passed from the Sumerians to their eastern neighbors the Elamites, and to their Semitic conquerors, the Babylonians and Assyrians, and from them it spread to their northern neighbors about Lake Van, to the Hittites in the west, and to other peoples of the ancient East. By the fifteenth century before Christ cuneiform Assyrian was the usual means of international correspondence and was even employed by the Egyptian kings in corresponding with their provincial governors in Syria.

There are certain features of cuneiform writing with which the student of Hittite should familiarize himself, from texts transcribed into Roman letters.

C4. Cuneiform characters represented syllables, not single sounds, except that there were also special signs for the four vowels *a, e, i, u*. Syllables containing a consonant might consist—

(1) of a vowel followed by the consonant, for example, *ab, eb, ig, uz,* etc.;

(2) of a vowel preceded by the consonant, for example, *ba, be, di, nu;* or

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[1] Knudtzon, *ZAB.*

[2] Winckler, *Transactions of the Berlin Academy, 1888,* Pl. 6, before p. 1357.

(3) of a vowel both preceded and followed by a consonant, for example, *gal, pap, rid, sun,* etc. But

(4) There were no characters representing adjacent consonants[3] and few representing adjacent vowels (for example, *tras, trias, vau,* etc.), which are common in acrophonic pictographic writing, both Hittite and Minoan.

C**5.** There was, even in good Assyro-Babylonian writing, a large element of inexactness and consequent uncertainty. For example, while there were three characters for the three syllables *ba, bi, bu,* and three characters for *pa, pi, pu,* the characters for *ab, ib,* and *ub* were used to represent *ap, ip,* and *up* as well. Moreover, the character for *pu* might be displaced by the character for *bu* and, while there was a character for *be,* there was no special character for *pe.* Furthermore, the *m*-characters, namely those for *ma, me,* etc., represented also *wa, we,* etc. In fact, all three labials, *m, w,* and *u,* may be interchanged.

C**6.** An element of still greater uncertainty lies in the fact that certain cuneiform characters may be either ideograms or syllabic signs. Thus, one and the same character may be an ideogram for *bēlu,* 'lord,' or for *adi,* 'up to,' or the phonetic sign for the syllable *en* in any word containing that syllable.

C**7.** Moreover, a character may represent various phonetic syllables having little or no resemblance. Thus, one and the same character may stand, not only for the similar syllables *bat, baṭ, bad,* and *bit, mit, miṭ, mid,* but also for such very dissimilar syllables as *be, til, ziz.* This doubtless arose, in part at least, from the assimilation and confusion of signs originally quite distinct.

C**8.** In certain provincial or foreign texts, like the Hittite, not only do the characters deviate in form,[4] but there are, as pointed out by Winckler,[5] still more uncertainties and irregularities. Thus, in the texts interpreted below:

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[3] It must be observed that such a transcription as *ch,* for which some use *ḫ* or χ, does not represent two consonants, but a single consonant, just as it does in German *ich* and as *th* does in English *the.*

[4] See the list given by Delitzsch (*TG.,* pp. 47 ff.), who calls attention (*TG.,* p. 4) to the fact that the Hittites evidently got cuneiform writing from the Babylonians, not from the Assyrians.

[5] See Erman's report on the work of the youthful Winckler and Lehmann, *Transactions of the Berlin Academy, 1888,* pp. 586–87; and Winckler's own statements, pp. 1349–50, 1352. Winckler's conclusions were based on the observation that what appeared to be one and the same word was spelled in various ways. Had he known that the text was Greek, and thus been in a position to compare the cuneiform spellings with the Greek sounds that they were used to represent, he would have seen that the irregularities and discrepancies were far greater than he could well have imagined.

the sound .k is represented by signs *k, ch, q*
the sound .g is represented by signs *ch, g*
the sound .s is represented by signs *ś, s, z*
the sound .e is represented by signs *i, ii, e, ee,*

and the same word may appear in various spellings, as in the case of ὑπαγει, spelled *up-pa-ak-ki* in *L.*, l. 28, and *up-pa-ach-chi* in *L.*, l. 18.

C**9.** (1) As a rule, double consonants are not graphically distinguished from single ones. In fact, even when a word ends in the same consonant that the next word begins with, the consonant may be written but once. Thus, *iš-ša ri-iš-ši* spells ἱστωρ ῥησι, 'skilled in speech,' *L.*, l. 28. This practice is common to most early systems of writing. (2) At times a consonant is doubled in order to indicate that the preceding vowel is accented or that it is long. And the fact that a vowel is long may be indicated by writing its special sign after the character that implies it. (3) But in most of the Hittite texts that I have observed no such practice appears. In fact, in numerous cases two or more of the sounds in a word are represented twice, usually by the last element in one character and the first in the following character. For example, *cha-at-ra-a-i* = Ϙατραι, *S.*, l. 13; *bi-ich-chi-i* = ϝικι, *S.*, l. 9; *ka-a-aš-ma-at-ta* = κοσματα(ν), *L.*, l. 11. Observe also *a-a-ra* = ἀρος; *a-a-an-za* = ἀνζο. (4) A variant of this is the use of two roughly equivalent but not identical spellings, for example, the *e-i* of *Ne-it-ta* = Νηϑω(ι), *L.*, l. 18; the *ú-w* of *ú-wa-da-an-zi* = ϝαδανοι, *L.*, l. 13, and of *ú-wa-an-zi* = ὑονζι, *L.*, l. 22; and the *š-z* of *Aš-za-a-i* = 'Ασαι, *S.*, l. 15; the *k-ch* of *k-chu-u-ma-an-da* = κομοντο, *L.*, l. 26.

C**10.** As may readily be imagined, the spellings achieved by means of so defective a system were deplorably ambiguous. To remedy its shortcomings two devices were employed: (1) *Determinatives:* Wherever the sound-representation was so obscure as to leave the reader in doubt as to what word was meant, an ideogram indicating to what general category the word belonged might be placed before it. Such signs are called determinatives. An upright wedge 𒁹 (the bar ▯ of Hittite pictographic writing) was, for example, placed before masculine proper names, and there was a corresponding ideogram for feminine names. A determinative composed of three wedges (originally a pictogram representing three mountains) was placed before the name of a mountain or a country, and so forth.[6] (2) *Phonetic Complements:* Besides the uncertainties due to ambiguous spelling, there were uncertainties about the precise meaning of the ideograms, some of which had more than one value. In such cases a phonetic complement might be added to the ideogram. Sometimes this was a complete spelling of the word which the ideogram was intended to suggest;[7] usually it was merely the last syllable or the inflectional ending. (Cf. EGIR-pa, line 20 of the Letter.)

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[6] The determinatives for 'town,' 'bird,' and 'fish' were placed *after* the words which they were intended to elucidate.

C11. The transfer of a system of writing from one language to another usually results in new difficulties and complexities, and this was the case with the adaptation of cuneiform writing to the representation of Hittite Greek.

C12. Assyrian had no *o* and so no character for it. As had already been observed in the writing of Greek proper names in cuneiform records, scribes naturally availed themselves of the cuneiform characters implying one of the vowels most like *o*, namely, *u* or *a*: *chu-u-ma-an* = κομων. Observe also *kat-ta* = κουτω; *na-mu* = νομοι, *S.*, l. 12; *nu-ut-ta* = νοτοι. This practice led to some confusion in the use of *u* and *a* as signs of their own sounds. Thus, *a* occasionally stands for *u* (*ra-a-tar* = ϱ̔υτωϱ, *S.*, l. 3) and *u* could stand for *a* (*an-tu, L.*, l. 25 = *an-da, L.*, l. 18, that is, ἀντα(ν), Attic ἄντα, 'facing,' 'against'; *aš-šu* = ἀσσα, *L.*, l. 28; *aš-šu-un* = ὧς ἀν, *L.*, l. 25; *u-i-e-nu-un* = ϝιεναν, *L.*, l. 11). It is worthy of note that *an-tu* is followed by *uch-šu-uš,* and *aš-šu* by *up-pa-*(*ah-*)*ki.* The final *-un* of *u-i-e-nu-un* and *aš-šu-un* might, of course, have been written *-an.*

C13. Greek has numerous groups of adjacent consonants. (1) Two adjacent consonants in the interior of a Hittite word were usually written as in Assyrian. The first consonant was expressed by a character ending in that or a similar consonant, and the second was represented by a character beginning with that or a similar consonant. Thus *al-qa* = ἀλγο, *eš-ki* = ἰσχι, *S.*, l. 25. (2) The same method could be used in writing groups of two consonants at the beginning or end of a word, that is, by blending the spelling of the word with that of the adjacent word, one character straddling the boundary. (3) But sometimes one of the two adjoining consonants was ignored in writing, for example, the τ of στ: *ša-an-chi-iš* = στονχεες, *S.*, l. 8. A similar omission of τ after σ is observable medially in a few words in which the σ would be followed by ϱ and would seem to have really become silent: *iš-šar* = ἱστωϱ, *L.*, l. 29; *bi-it-bi-eš-šar* = πιπ-ισ(τ)ωϱ, *L.*, l. 28; *eš-ra-ni-š* = ἱσ(τ)ϱωνες, *S.*, l. 25; *wa-al-ki-iš-šá-ra-aš* (§ B16, 5). (4) And sometimes the two adjacent consonants were so written that an unnecessary vowel stood between them and had to be ignored in reading. Thus *ga-an-wa-an-na-aš* = γανϝονος, *S.*, l. 2.

C14. One or the other of the latter two methods had to be resorted to in representing groups of three consonants. Thus, (1) in *eš-ra-ni-š* | *al-qa* = ἱστϱωνης ἀλγο, *S.*, l. 25, the τ is not expressed at all; while (2) in *Qar-tab-ia* = Καϱτϝια a silent α is written between the τ and the ϝ.

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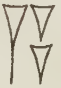
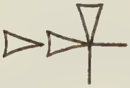
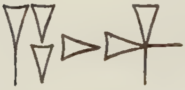
[7] Schrader, *Transactions of the Berlin Academy,* 1888, p. 586, § 2.

C15. A diphthong, like two adjoining vowels belonging to separate syllables, was sometimes represented by two or more characters. Thus, *a-ú* = αὐ, *L.*, l. 12; *ku-in* = κοιν, *L.*, l. 13; *Cha-at-ra-a-i* = Ϙατραι, *S.*, l. 13; *i-ga-it* = ἱκοιτ, *L.*, l. 27; *ša-ga-in* = σαγαιν (Yuzgat); *Ku-iš* = Κοες, *S.*, l. 14; *na-an* = ναων, *L.*, l. 15; *ni-an* = νεαν, *L.*, l. 14. But there is a special character for *ia* (in fact, two such). Thus, *a-ni-ia, L.*, l. 17, and *an-i-ia, S.*, l. 22 = ἀνια. And characters implying a diphthong were not totally wanting; see, for example, *nai* = ναι, *S.*, l. 12. Still, not infrequently, the scribe contented himself with expressing only one (usually the first) of the two adjoining vowels, leaving it to the reader to supply the other. Compare *tuš-ša-ta* = τοσαυτα(ν), *na-mu* = νομοι, *S.*, l. 12; *am-me-el-la* = ὁμιλοι, *nu-ut-ta* = νοτοι, *t-ú-wa-an-du* = ϑυοιντο, *Ne-it-ta* = Νηϑω(ι), *kat-ti* = κουτι, *na-aš-ta* = νοστοο, *ma-mu* = μαμοο, *kúr-re* = κυρεα. Similarly *up-pa-ach-chi* = ὑπαγει.

C16. The spread of cuneiform writing from Sumerian to Assyrian and from Assyrian to Hittite led to the development of a peculiar kind of ideogram. For example, the Assyrians, having learned to write cuneiform from Sumerian scribes, were inclined to carry Sumerian forms over into Assyrian. In Sumerian the sign for 'water' and the sign for 'heaven' were combined, and the group was used for 'rain':







The Assyrians borrowed the Sumerian method of writing 'rain,' and used the group to represent their own word for 'rain,' which was *zunnu.*"[8] As such a Sumerian group does not spell the Assyrian word but simply implies the idea, we do not hesitate to apply to it the term "ideogram," though it differs in character from the original ideogram. And the same is true when the usage passed from the Assyrians to the Hittites; see Delitzsch, *TG.*, p. 6. We have similar phenomena in English. Thus & and + are by origin cursive ways of writing the Latin word *et*, 'and,' and are often used by us with that meaning. Similarly, we write *viz.* but read it 'namely,' and it is not likely that one person in a hundred thousand knows that *viz.* is a medieval way of writing *vi'et,* an abbreviation of Latin *videlicet,* 'namely,' by origin a contraction of *vidēre licet,* 'it is easy to observe.'

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[8] King, *Assyrian Language*, p. 60.

C17. It would at times appear as though a cuneiform character might be interpreted either as an ideogram or as a phonetic spelling of a Hittite word having a like meaning. See *dmq-in, L.,* l. 3; *gal-gal-aš, L.,* l. 4; *dam-an-ni, L.,* l. 13.

C18. In cuneiform writing words are often separated by more or less easily distinguishable spaces, cuneiform writing being in this respect superior to early Greek and Latin script. Sometimes the divider 𒀹 (compare pictographic ||) is employed. It is interesting to note that in the letter from King Tarcondorous postpositive μι, μις, μιν, τι, τιν are joined, like enclitics, to the preceding substantive. It is quite possible that we here have to do merely with a transfer of Assyrian usage; for enclitic *qe* (*L.,* l. 17) seems not to be so treated.

C19. The boundary between words is sometimes obliterated by the use of a character that spells the final sound or sounds of the first word and the initial sound or sounds of the following word. In such cases I use an upright line to mark the boundary. Thus in the Letter,

ša: cha-lu-ga-tal-la-š | a-ku-iš = καλογαθαλος ἀγοις, *L.,* l. 23; *du-š | a-aš-ša* = τυς ἀσσα, *L.,* l. 27.

šu: cha-at-ra-a-š | u-ub-bi = κατρας ὕπι, *L.,* l. 17.

at: cha-lu-ga-tal-la-a | t-ti-in = καλογαθαλο(ς) τιν, *L.,* l. 19; *i-na-a | t-ú-wa-an-du* = ἵνα θυοιντο, *L.,* l. 2.

ut: nu-u | t-at = νυ δοιτ, *L.,* l. 28.

uk: Zi-in-nu-u | k-chu-u-ma-an-da = Ζηνος κομοντο, *L.,* l. 26.

C20. From what has been stated above it will be clear that, at best, cuneiform writing often gives us only a very uncertain picture of a word. Though we may determine to a certainty what word is intended, and thus know what is meant, we frequently cannot be sure, for example, which of two or more vowels is intended, and so are uncertain what the case of a noun is or what the mood of a verb, or to what declension or other inflectional system a word belongs, or which of two equivalent words is meant. This uncertainty affects most seriously the inferences we should like to draw as to the early history of Greek speech. Thus it is not clear whether the accusative *mi* spells με or μιν; whether *wa-al-ki-iš-šá-ra-aš* (§ B16) spells ϝαλκιστερος or ϝαλκεστερος; whether *e-eš-šá-i* (§ B12) spells ἥσσαει or ἥσσαι; whether *šú-u-wa-an* (§ B16) spells σϝαον or σϝοον.

In cases like *ku-ru-ur* (§ B17) the ambiguity is of little importance, as the general Doric character of the text warrants us in deciding on κω rather than κου or κο.

Notes on the Text

The first two lines of the tablet are in Assyrian, the international language, and constitute a sort of label, informing anyone into whose hands the tablet might happen to fall that it was a copy of a letter sent to Tarcondorous, king of Arsama, by the king of Egypt. *Nimutria* is the throne name of Amenophis III, who died about 1380 B.C.

Lines 3–10 are a variant of the international form of greeting from monarch to monarch. The language employed is Doric Hittite with a very large admixture of Assyrian ideograms and determinatives.

Line 1. The first character of line 1 and the first character of line 2 are mutilated. The usual formula is the reading here adopted and which is accepted by Knudtzon, E. Meyer, Pinches, and Sayce. Winckler regarded the letter as having been written *by* Tarcondorous, a view which was accepted by Petrie and at one time by Sayce. It is so taken in Hempl, *OD*.

Line 2. The last character of the name Tarcondorous is blurred. Knudtzon (*ZAB.*, p. 1, n.), insists that it can be neither *uś* nor *du* and should be read *ba*. Winckler originally printed *du*(?) (*Transactions of the Berlin Academy,* 1888, p. 1349), but in 1907 (*VN.*, p. 40, n.) declares that the character is to be read as *uš,* the form being "die gewöhnliche in der hethitischen Keilschrift."

Line 13. *ál-chiš:* the first character might be an ideogram for 'heaven' or 'god,' or a spelling for *an, ál, íl,* or *li.* The second character might be an ideogram for 'sun,' 'day,' 'light,' 'white,' etc., or a spelling for *ud, tú, tam, par, pír, lach, lich, chís,* etc. Knudtzon (*ZAB.*, pp. 10, 9, 36, 54) reads *AN UD* and translates 'Sonnengott' or 'Sonne,' taking this to be a designation of the king of Egypt.

Line 14. *li-il-chu-mi-i.* Knudtzon reads: *li-il-chu-wi-i,* which is natural enough, since a preceding *u* would usually imply that a following ambiguous labial character represented *w* (see above, § C5).

For the words following (*ni-an,* etc.) the text reads *ni-an sag dú-ši,* a slip for *sag-an du-ši* with loss of the second *-an,* a very common form of miswriting. Knudtzon reads: *śaman-an rêši-ši,* "Öl für den (oder: ihren) Kopf."

Line 15. *šeš-li-ia.* The first character of this word appears in Winckler's transcript as composed of four small wedges followed by one upright. This, Winckler read as *ki,* Knudtzon as one of the various Hittite forms (*TG.*, p. 48) of *la,* Hempl (*OD., loc. cit.*), as *se.* For none of these is there justification; instead we have to deal with a ligature of *še* with *eš* corresponding to the Hittite ligature *še-ir* = *šir* (see Delitzsch, *TG.*, p. 49). I may add that the sign for *eš* found in the ligature *šeš* is also the usual sign for *ab/ap.*

Line 17. The last character is read by Knudtzon as *es*. He assumes that one of the three wedges has been worn away. It is more probable, however, that there never were more than two wedges, and that they are merely placed in an unusual position. Such deviations from normal usage are very common in Hittite cuneiform (see § C8).

Line 25. *ub-bi-iš-ta-du*. Knudtzon reads -*ba* instead of -*du*. The character is, in fact, identical with the usual Assyrian form of *ba*. But the Hittite form of *ba* is very different (see *TG.*, p. 47). The character presented here is, however, very much like the usual Hittite and Assyrian sign for *du*, and was doubtless intended for *du* in this passage.

Line 28. Knudtzon and Pinches give -*ta* for the third character, although Winckler's transcription clearly shows -*at*. This would make line 28 begin just like line 22, but the change is hardly justifiable.

Lines 30–38. There are, in the list of presents with which the letter ends, certain difficulties which I have not overcome. I therefore prefer not to undertake the interpretation of it at present.

LETTER OF AMENOPHIS III

TRANSCRIPTION OF THE CUNEIFORM TEXT[9]

1 [U]m-ma ^{m}Ni-mu-ut-ri-ia šarru rabû šàr *MÂTU* Mi-iṣ-ṣa-ri

2 [an]na ^{m}Tar-chu-un-da-ra-uš šàr *MÂTU* Ar-sa-ma ki-bí-ma

3 Kat-ti mi dmq-in BIT-ZUN mi DAM-MEŠ mi TURMEŠ mi,
κουτι μι[ν] τυχιν DWELLINGS μι WIVES μι CHILDREN μι,

4 *AMÊLU-MEŠ* gal-gal-aš ZAB-MEŠ mi, *IMÊRU* KÚR-RA-ZUN mi
καλ-καλως WARRIORS μι HORSES μι

5 bi-ib-bi-it mi, KÚR-KÚR-ZUN mi kán-an-da
πιπιτ μι LANDS μι γανοντα

6 chu-u-ma-an dmq-in.
κομων τυχιν.

7 Du-u | q-qa kat-ta chu-u-ma-an dmq-in e-eš-tu,
τυ γα κουτω κομων τυχιν ἰστοο,

8 BIT-ZUN ti, DAM-MEŠ ti, TUR-MEŠ ti, *AMÊLU-MEŠ* gal-gal-aš,
DWELLINGS WIVES CHILDREN καλ-καλως,

9 ZAB-MEŠ ti, *IMÊRU* KÚR-RA-ZUN ti, bi-ib-bi-it ti
WARRIORS HORSES πιπιτ τι

10 KÚR-ZUN ti chu-u-ma-an dmq-in e-eš-tu.
LANDS κομων τυχιν ἰστοο.

11 Ka-a-aš-ma-at-ta u-i-e-nu-un ^{m}Ir-ša-ap-pa
κοσματα[ν] ϝιεναν Ἰρσαβο[ν]

12 *AMÊLU* cha-lu-ga-tal-la-an mi-in a-ú ma-ni TUR-SAL ti.
καλογαθαλον μιν αὖ μανι[ν] DAUGHTER.

13 Ál-chiš mi ku-in dam-an-ni ú-wa-da-an-zi
Ἀλγις μιν κοιν δομονι ϝαδανσι

14 nu-uš-ši. Li-il-chu-mi-i ni-an sag[-an] du-ši.
νοσ[τ]ῑ Λελχο[ι]μι νεαν σαγαν δοσι[ν].

15 Ka-a-aš-ma-ta up-pa-ach-chu-un 1 su-cha šeš-li-ia AZAG-GI-ru
Κοσματω[ι] ὑπαγον ἓν ζυγο[ν] σεσλια

16 dmq-an-ta.
τυχοντα.

17 An-ni-ia at-ta-aš ma-mu ku-e da-aš cha-at-ra-a-š | u-
Ἀνια ἀττας μαμοο *q*ε τας κατρας

18 ub-bi wa-ra-at-mu Ne-it-ta up-pa-ach-chi. EGIR an-da
ὑπι ϝαρατμο[ν] Νηθω[ι] ὑπαγει. Ἀφ' ὤ ἀντα

19 na-aš-ta *AMÊLU* cha-lu-ga-tal-la-a | t-ti-in am-me-el-la
νοστοο καλογαθαλο[ς] τιν ὁμιλο[ι]

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[9] The upright | signifies that the preceding final letter and the following initial letter are represented by one cuneiform character.

LETTER OF AMENOPHIS III

Translation

1 Thus Nimutria, the great king, King of Egypt,
2 to Tarcondorous, King of Arsama, writes:
3 Providence protects me,
6 a fostering providence (protects)
3 my dwellings, my wives, my children,
4 the nobles, my warriors, my steeds,
5 my chariots, my fair lands.

7 And may a like fostering providence protect you,

8 your dwellings, your wives, your children, the nobles,

9–10 your warriors, your steeds, your chariots, your lands.

11 As a commissioner I have sent Hierosabos

12 my nobleman, for the jewel your daughter.

13 My messenger will accompany the lady on the

14 journey home. I should like to get new armor as a gift.

15 By the commissioner I have sent a pair of golden vessels,

16 full weight.

17 The grief of her mother and father will bring down

18 imprecations on the accursed Netho. Then for the journey home

19 let one of your noblemen associate himself with

20 *AMÊLU* cha-lu-ga-tal-la-an. EGIR-pa Chat-ra-a chu-u-da-a ak-
ϰαλογαϑαλον. 'Αφ' ὡ Ϙατϱα ϰυτα ἀγνα
21 na i-na-a | t-ú-wa-an-du.
ἱνα ϑυο[ι]ντο.
22 Nu-ut-ta ú-wa-an-zi, ú-da-an-zi tuš-ša-ta TUR-SAL ti.
Νοτο[ι] ὑονσι, ὑδονσι τοσα[υ]ταν DAUGHTER τιν.
23 *AMÊLU* cha-lu-ga-tal-aš mi-iš *AMÊLU* cha-lu-ga-tal-laš | a-
ϰαλογαϑαλος μις ϰαλογαϑαλος
24 ku-iš tu el-ú it-na-aš ag-ga-aš.
ἀγοις τυ ἐλο[ι] ἰτνος ἀγος.
25 Nu-mu an-tu uch-šu-uš ga-aš-ga-aš kúr-ia-aš. Ub-bi-iš-ta-du aš-šu-un
Νωμω ἀντα ὀξυς χαος-χαος ϰυϱιος. 'Υφιστα[ι]το ὡς ἀν
26 Zi-in-nu-u | k-chu-u-ma-an-da.
Ζηνος ϰομοντο.
27 Nu-cha ad du-š | a-aš-ša kúr-e i-ga-it.
Νυ ϰα[ι] αδ τυς ἀσσα ϰυϱε[α] ἰϰοιτ.
28 Nu-u | t-at ka-a-aš-ma bi-ib-bi-eš-šar up-pa-chu-un aš-šu up-pa[-ak]-
Νυ δο[ι]τ ϰοσμω[ι] πιπισ[τ]ωϱ ὑπαγον ἀσσα ὑπαγει
29 ki iš-ša ri-iš-ši Ir-ša-ap-pa *AMÊLU* cha-lu-ga-tal[-la-a].
ἱσ[τ]ω[ϱ] ϱησει 'Ιϱσαβο[ς] ϰαλογαϑαλ[ος].

20 (my) nobleman. And (while still) there (at home) let

21 the sacred Hittite pelts be offered.

22 The south winds will bring rain, will do honor to your distinguished daughter.

23 May the nobleman, (may) the nobleman

24 (that) you send drive off daring chieftains.

25 I shall provide against (them) capable, trustworthy guards. May these support (the travelers) as though

26 they were protected by Zeus.

27 And now may some pledges reach you.

28 And may the knight (that) I have sent duly present whatever things

29 Hierosabos the commissioner, skilled in speech, shall bring.

Commentary

Kat-ti (*L.*, l. 3) = ϰουτι, 'protects,' third person singular of an athematic[10] verb meaning 'hear,' 'listen,' 'watch,' 'care for,' 'protect,' attested by Latin *cau̯eo* (with *cau̯-é-* from *cou̯-é-*), by the side of Greek ἀ-ϰούω, etc. (For α spelling ου, compare § C12.) Compare *Kat-ta* (*L.*, l. 7) = ϰουτω.

Mi (*L.*, l. 3) = με, 'me,' the accusative, or (the spelling being ambiguous) μι(ν), the Doric-Hittite dative (see *L.*, l. 12) of the personal pronoun but here used as an accusative just as in later Doric the accusative was με but the dative μιν was also used as an accusative, and as in modern English the old dative *him* is used both as a dative and as an accusative. In later Doric we find the ε of ἐ-γων extended also to the oblique cases, hence ἐμιν for earlier μιν.

dmq-in (*L.*, ll. 3, 6, 7, 10). In corresponding Assyrian versions of this greeting we find the Assyrian word *šulmu,* 'well-being,' 'prosperity,' and there can be no doubt that our text contains a word of similar meaning. Knudtzon takes *dmq* to be Assyrian *dmq,* 'beautiful,' 'good,' 'gracious,' here used as an ideogram. As, however, *dmq* is used in line 16 to spell the first syllable of τυχοντα, I am inclined to believe that it is so used in *dmq-in.* This gives us the very appropriate word τυχιν, 'fortune,' a *yen*-stem, mate of the *ōn*-stem seen in Τύχων, 'Fortune,' 'the god of chance,' both being derivatives of τύχη, 'good fortune.' For τυχιν we should expect *τυχις in later Greek.[11] As the Greek word is modified by the participle ϰομοων, 'fostering,' 'caring for' (*L.*, ll. 6, 7, 10), it may be best to render it 'providence' rather than 'fortune.' I should add that it is not impossible that *dmq* may at one and the same time be an ideogram and serve as a phonetic spelling.

mi. The *mi,* 'my' (*L.*, ll. 3, 4, 5), and *ti,* 'thy' (*L.*, ll. 7, 8, 9, 10; *TG.*, pp. 19, 24), following the ideograms for 'dwellings,' etc., are indeclinable postpositive possessive adjectives. They are found also in *L.*, ll. 12, 13, and 22. Before a vowel the longer forms *min* and *tin* are found (*L.*, ll. 12, 19); see § B8. But the ν may be lost at the end of a sentence (*L.*, l. 12) even if the following sentence begins with a vowel. A tendency to assume inflection is betrayed by the new nominative form *mis* (*L.*, l. 23). The words are identical with the usual Doric datives ἐ-μιν, τιν, ϝιν; see § B9.

AMÊLU-MEŠ (*L.*, l. 4), determinative (§ C10) placed before the names of tribes, classes, and professions, the plural of *AMÊLU* (*L.*, ll. 12, 19, etc.).

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[10] Wright, *Gr. Gr.*, § 450; Smith, *Gr. Gr.*, §§ 336 ff.

[11] Wright, *Gr. Gr.*, § 348.

gal-gal-aš (*L.*, ll. 4, 8) is regarded by Knudtzon as the ideogram for 'nobles' plus the ending *-aš*. It is, however, rather remarkable that *gal-gal* should be the only ideogram in the series that was given a Greek inflectional ending. One is therefore tempted to regard *gal-gal-aš* as a Greek word = *καλ-καλως, Attic -ους, the accusative of *καλ-καλοι = Latin 'optimates' or καλοκἀγαθοί (see *cha-lu-ga-tal-la-an* (*L.*, l. 12). With this reduplicated form of καλός, 'fair,' 'good,' 'noble,' compare Vedic *mahā-mahá-ḥ*, 'gross-mächtig,' etc., Brugmann, *Grundriss*,^{2} Vol. II, Part I, § 25*d*. See also *ga-aš, ga-aš, L.*, l. 25, and *bi-ich-chi-bi-ich-chi; L.*, l. 9. For *-aš* as a spelling for -ως, see *L.*, l. 25.

mi (*L.*, l. 4), see line 3.

IMÊRU (*L.*, l. 4), determinative.

bi-ib-it (*L.*, ll. 5, 9) = πιπιτ < *h̤ιππιτ (see below), which would be *ἵππι in Attic. (Compare μέλι, μέλιτος. μέλι : *ἵππι :: μελι-ηδής : ἱππιάναξ, 'king of horsemen.') The word means 'things pertaining to horses,' but here it was probably restricted to 'chariots,' for other versions of this international form of greeting have the word for 'chariots' in this place. In form, the word is a neuter collective *t*-derivative[12] of ἵππος, 'mare,' 'horse,' corresponding to the masculine *t*-derivative[13] seen in Latin *eques, equitis*, 'horseman.' Compare ἱππότης, 'horseman,' which was originally a feminine collective. It is evident that Indo-European *cw* had (at least medially) become ππ[14] at a time when *q* was still intact.

The various forms of ἵππος deserve special attention.[15] In the first place, the rough breathing of the usual Greek forms has never been explained. In the second place, the parallelism of cuneiform *chipa* (in names like *Tadu-chipa, OD.*, p. 188) with classical Greek ἵππος is, in a measure, misleading. The usual Greek rough breathing is generally ignored in cuneiform texts. The Assyrian character transcribed *ch*, χ, or *ḫ* by modern scholars was the letter for the velar fricative spelled *ch* in Scotch *loch* and German *Loch;* but in cuneiform Hittite texts it was used to represent any Greek velar consonant (§ C8), perhaps most often Greek *q*, for example, in *chat-ra-a* = Ϙατρα (*L.*, l. 20). Now, our *bi-ib-it* = πιπιτ furnishes the key to the explanation of the *ch* of *chipa* and of the *h* of ἵππος. The former was the voiceless velolabial fricative *h̤* (the *wh* of English *what*, a sound intermediate between *q* and *h*), and the latter was an *h* that arose out of the earlier *h̤*. In each case we have to do with telemimesis, whereby the first syllable of the word is made to begin like the second. The *w* of *ecwos* was unvoiced by the preceding voiceless *c* and thus became *h̤,* just as English *equity* is pronounced *ech̤iti* more often than *ecwiti.* By telemimesis, *ec-h̤os* became *h̤ec-h̤os.* Between the two velars the *e* rose to *i,* a phonetic process comparable to the rise of *e* to *i* in Old German if the high back vowel *u* stood in the following syllable. Later, the medial consonant group (the velar stop *c* and the following velolabial fricative *h̤*) compromised in the labial stops *pp,* much as the velar fricative χ and the dental stop of older German *nichts* (= .*niχts*) sometimes compromised in the velar stop *c*; cf. vulgar *nix* (= .nics). And still later the initial velolabial fricative *h̤* became *h,* just as did the *h̤* that arose out of *su̯.*[16] Compare the *wh* (= .*h*) in English *who,* etc. The feminine *h̤ippa* was spelled *ḫipa/chipa* in cuneiform, and the masculine *hippos* < *h̤ippos* is spelled ἵππος in ordinary Greek. The telemimesis seen in πιπιτ from h̤ιππιτ is, of course, much younger than that seen in **h̤ec-h̤os* from **ec-h̤os.* In fact, it constitutes a repetition of the process, thus—

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[12] Brugmann, *Grundriss*^{2}, Vol. II, Part I, § 317.

[13] *Ibid.*, § 315.

[14] *Ibid.*, I, § 603.

[15] Kretschmer's attempts at an explanation (*Einleitung*, pp. 247 ff.) were futile. See also Brugmann, *Grundriss*^{2}, I, 106, 312.

ec-h̤os > *h̤ec-h̤os* > *h̤ic-h̤os* > *h̤ippos* > *hippos;*
ec-h̤it > *h̤ec-h̤it* > *h̤ic-h̤it* > *h̤ippit* > *pippit*

Exactly the same is true also of *bi-ib-bi-eš-šar, L.,* 1. 28.

kán-an-da (*L.,* 1. 5) = γανοντα from γαναόντα (§ B1, 5), Doric Hittite for γανῶντα, 'fair,' neuter plural participle of γανάω, 'shine,' 'look fresh,' applied by Homer (*Od.,* VII, 128) to garden beds. The word here limits the preceding word for 'lands,' one of the various neuter nouns having this meaning.

chu-u-ma-an (*L.,* ll. 6, 7, 10) = κομων < *κομεων (§ B1, 5), Doric for Attic κομέων > κομῶν, 'fostering,' participle of κομέω, 'take care of,' 'care or provide for.' Compare *chu-u-ma-an-da* (*L.,* 1. 26) = κομοντο, Doric Hittite for ἐ-κομεόντο/ἐ-κομοῦντο, '(as though) they were cared for.'

dmq-in, see *L.,* 1. 3.

du-u (*L.,* 1. 7) = *tú* (*L.,* 1. 24; *S.,* 1. 8), *tú?* (*S.,* 1. 11) = τύ, the regular Doric form for Attic σύ, 'you.' Here, as in later Doric, τυ is used as an accusative. See also the genitive *du-š* (*L.,* 1. 27) = τυς.

q-qa (*L.,* 1. 7; *S.,* 1. 2) = γα, the Doric form corresponding to Attic γε. Here it means 'so,' 'and so,' or 'likewise.' In the Song it simply calls special attention to the preceding name and may be rendered 'yea' if at all.

kat-ta (*L.,* 1. 7) = κουτω, 'may (providence) protect,' the singular imperative of *kat-ti,* κουτι (*L.,* 1. 3). For ου and ω spelled *a,* see § C12.

chu-u-ma-an (*L.,* 1. 7) = κομων; see 1. 6.

dmq-in, see 1. 3.

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[16] Brugmann, *Grundriss*², I, 306.

e-eš-tu (*L.*, ll. 7, 10) = ἰστοο, the genitive of *ἰστος, the Hittite-Doric form of ἐῖσος/ἶσσος/ϝισϝος, 'equal,' 'like.' The Cretan form ϝισϝος is regularly derived from *ϝιστϝος < *ϝιδσϝος. The Hittite-Doric form betrays special changes. *ϝιτσϝος > *ἰτσϝος > ἰστ(ϝ)ος. As antevocalic ϝ was normally intact (§ B2, 10), the initial ϝ of this word must have disappeared by teleterosis (just as it might arise by telemimesis; the τ then vaulted the adjacent σ; and the second ϝ later disappeared after the τ, as it did after the λ of καλ(ϝ)ογαθαλος, *L.*, l. 19, etc. I take ἰστοο to be an adverbial genitive (compare πολλοῦ, ολίγου, etc.) with the meaning 'in like measure.' It may also be regarded as a quasi-adjective following its noun; compare *We have bread enough* / *We have bread in abundance.* It is not impossible, however, that *e-eš-tu* spells ἰστον and that this is the adverbial accusative = ἶσον. For loss of -ν, see § B2, 10.

Knudtzon quite naturally interpreted *e-eš-tu as* ἔστω, Latin *esto;* and upon this combination chiefly he based his belief that the texts were Indo-European. See also Kretschmer, *Deutsche Litteraturzeitung* (1903), XXIV, 780.

gal-gal-aš (*L.*, l. 8), see l. 4.

bi-ib-bi-it (*L.*, l. 9), see l. 5.

chu-u-ma-an (*L.*, l. 10), see l. 6.

dmq-in (*L.*, l. 10), see l. 3.

e-eš-tu (*L.*, l. 10), see *L.*, l. 7.

ka-a-aš-ma-at-ta (*L.*, l. 11) = κοσματον, Attic κοσμητήν, accusative of κοσμητής, 'commissioner' or 'director' of an expedition. See also *ka-a-aš-ma-ta,* 'by the commissioner,' *L.*, l. 15.

u-i-e-nu-un (*L.*, l. 11) = ϝιεναν (or ϝιεμον, if the telemimesis of μ–ν to ν–ν is orthographic only), 'I sent (on my business),' Attic ἰέμην/ἱέμην, 'I longed to,' 'I longed for.' 'Send' is a more primitive meaning than the familiar 'desire.' The relation of the meanings demands a word of explanation. We may start with the idea of 'move quickly,' 'speed,' 'hasten'; or 'cause to move quickly,' 'despatch,' 'chase,' 'hunt.' Cf. ϝιεϱός, 'quickly'; οἴκαδε ἱέμενος = German *nach Hause jagend; Sie jagte ihn gleich nach dem Arzt;* Sanskrit *vḗti,* 'pursue'; Latin *vēnor,* 'to hunt.' The divergent meaning 'long for,' 'desire,' arose out of the idea 'run after,' 'try to catch,' 'seek.' Cf. *She was always running after the boys* = 'She was boy-mad'; *You are looking for trouble* = 'You are anxious to get into trouble.' In much the same way the idea 'long for,' 'desire ardently,' arose out of the idea 'reach for,' 'try to grab'; cf. German *langen,* 'extend the arm,' 'reach for,' English *long for,* 'desire ardently,' German *ver-langen,* 'yearn for,' 'demand'; also μαίομαι, 'extend the hand,' 'strive for,' μαιμάω, 'be eager for.' It was natural that the meaning 'desire' (that is, 'be eager to get for one's self') should become restricted to the middle voice. In the Greek that we have hitherto known, the meaning 'send' is expressed by ἵημι < *yi-yē-mi, Latin *jacio,* 'throw,' 'cause to go.' It is probably due to the association of the two words that the rough breathing was often prefixed to ἵεμαι.

I have assumed that in *u-i-e-nu-un*/ϝιεναν we have a case of the spelling of *a* with *u*; see § C12. But it is possible that *u* here has its more usual value *o,* and that our form is ϝιενον. Whether this be so or not, I would suggest that the hitherto unexplained ending -μᾱν/-μην arose out of an earlier -μον. It is natural to assume that there once was in the first person an ending -μο corresponding to the -σο and -το of the second and third persons:

μι	μ	μαι	μο
σι	ς	σαι	σο
τι	τ	ται	το

By analogy to the active -ομ/-ον, the middle -μο would readily become -μομ/-μον, whence our ϝιεμον or ϝιενον. The later change of -μον to -μᾱν/-μην must be brought into relation with the struggle that took place in the dual, between -τον and -σϑον, on the one hand, and -τᾱν/-την and -σϑᾱν/-σϑην, on the other. This struggle was not definitely settled, but tended in favor of the -ᾱν/-ην forms in secondary tenses, and was apparently definitely so settled in the case of the first person singular. I may add that -μην was already in vogue in Minoan Greek. On the linear tablet given by Evans on page 32 of his *Scripta Minoa* it occurs in three verbs, the first of which is ἱστᾱμην and the second ἥμην.

Ir-ša-ap-pa (*L.,* l. 11) = Ἱρσάβον, accusative of *Ir-ša-ap-pa* (*L.,* l. 29) = Ἱρσάβος, Attic *Ἱερόσαβος, literally, 'priest of Sabos'; cf. Ἱερο-βάαλ, Ἱερόϑεος, etc. For (-ν) and (-ς) see § B2, 2 and 3. The usual Doric form of ἱερος was ἱαρος (compare Ἱαροσιος) and such a form may have been the basis of ἱρος in the Doric of Arsama (with regular loss of the pretonic vowel, and thus may be reflected in the Ἱρ- of our Ἱρσάβος. Still, we may have to do with the same form that produced Ionic ἱρός, Lesbian ἶρος; Buck, *Greek Dialects,* § 13, 1. That we have Ἱρ- rather than Ἱρο- (cf. ἱερο- in Ἱερόϑεος, etc.) is due to the fact that the Doric compound would be accented Ἱρο-σάβος and the pretonic *o* might normally disappear (§ B1, 5).

cha-lu-ga-tal-la-an (*L.,* ll. 12, 20), accusative of *cha-lu-ga-tal-la-š* and *cha-lu-ga-tal-aš* (*L.,* l. 23) and *cha-lu-ga-tal-la-a*(*š*) (*L.,* ll. 19, 29 = καλογαϑαλος, Doric Hittite for καλοκἀγαϑός, 'nobleman.' The corruption of the word is both natural and interesting. The trouble was caused by the reduplicated phonology κα—κα-γα, which resulted in the anticipation of the γα in place of the second κα, and the later change of καλογα-κο to καλογα-λο:

καλοκαγαθος >
*καλογαθακος >
καλογαθαλος.

It is interesting to observe that, while classical Greek retained the form καλὸς κἀγαθός, etc. (καλοκἀγαθός appearing first in Pollux, 180 A.D.), the conglomerate form prevailed in Doric Hittite at so early a day that its make-up was forgotten and its form distorted.

mi-in (*L.*, l. 12) = μιν, 'my,' the usual Doric dative ἐ-μιν, but used as a genitive (cf. Homeric ἐμέθεν, both genitive and dative), or rather as an indeclinable possessive adjective (compare English *his,* originally the genitive of *he*). See *mi, L.,* l. 3.

a-ú (*L.*, l. 12) = αὐ, 'for.' This αὐ, 'for,' 'to get,' is a preposition, the mate of the adverb *au,* 'forth,' 'away,' and 'back,' 'again'; cf. Sanskrit *áva,* 'off,' Hesych. αὐ-χαττειν, 'go back,' 'go away'; Latin *au-fero,* 'take away,' etc. *au,* 'forth,' and αὐ, 'back,' evidently arose in αὐ και αὐ, 'back and forth.' By origin αὐ is a demonstrative adverb = 'there' (Brugmann, *Demonstrativpronomina,* page 97), and so αὐ και αὐ would be parallel with ἔνθα καὶ ἔνθα, 'back and forth,' originally 'there and there.' Compare Horace's *huc et huc* for the usual *huc et illuc, huc atque illuc,* etc. For the development of the meanings 'forth,' 'back,' 'away,' 'off,' and 'for' (= 'to get'), compare older German *vort,* 'forth,' German *fort,* 'away,' 'off,' *vor,* 'forth,' 'before,' English *for,* 'forth,' 'for' (= 'to get'), etc.

ma-ni (*L.*, l. 12) = μανιν, the accusative of *μανις, Sanskrit *maṇi-ḥ,* 'jewel,' cf. μάννος, 'necklace.' For (-ν) see § B2, 3.

ál-chiš (*L.*, l. 13) = ἀλγις, Lithuanian *algis,* 'messenger'; whence the derivative *ἄλγελος, which (by teleterosis of *l–l* to *n–l*) became the later ἄγγελος. For the genitive see ἀλγισος (*S.*, l. 17). For Knudtzon's interpretation see § C20.

mi (*L.*, l. 13), see *L.*, ll. 3, 12.

ku-in (*L.*, l. 13, also *Yuzgat,* p. 7) = κοιν, 'with,' 'in company with,' 'and.' κοιν, earlier *κοιμ, arose out of *κομι, probably under the influence of κοινος < *κομιος, 'common,' 'what one has together with others,' in which -ιος was *-yos,* not *-ios.* *κομι is from κομ (Latin *com-, cum,* 'with') plus the locative-demonstrative ι seen in περί/*per,* ἐνί/ἐν, etc. Doric Hittite was fond of such forms; compare *ab-bi* = ἀπι, 'from' (*S.*, l. 14), and *u-ub-bi* = ὑπι, 'on,' 'upon' (*L.*, l. 18). Doric-Hittite ἀπι, Lesbian ἀπυ, and Attic ἄπς (spelled ἄψ), Latin *ap-s* (spelled *abs*), show *ap* with one or another of the three locative-demonstrative suffixes *i, u, s.* As used in our text, κοιν is practically a conjunction, meaning 'and,' for it is followed by the plural verb. The phenomenon is observable in all languages; compare *Syrus cum illō vostrō consusurrant,* Terence, *Heauton.*, 473; and Goethe's *Der Pfarrer mit dem Vater gingen bedenklich dem Gemeindehause zu.*

dam-an-ni (*L.*, l. 13) = δομονι, the locative-dative of an *n*-stem meaning 'lady'; cf. Latin *dominus/domina,* Greek ἀδμενίδες. Knudtzon (page 9, 35) took *dam* for the ideogram for 'woman'; see § C17.

ú-wa-da-an-zi (*L.*, l. 13) = ϝαδανζι, 'they go,' 'they will go.' I think it more likely that the form is parallel with the Latin indicative *vadant*(*i*), 'they wade,' than with the subjunctive *vādant*(*i*), 'they go,' though it has the meaning attached in Latin to the latter. For the assibilation, see § B2, 7.

nu-uš-ši (*L.*, l. 14) = νοσσῖ, 'on the homeward journey,' locative of νόστος. The fact that we here have *šš* before *-i*, contrasting with the *št* of *na-aš-ta* = νοστοο (*L.*, l. 19, and *S.*, l. 17), makes it likely that we have assibilation before *-ī*.

li-il-chu-mi-i (*L.*, l. 14) = λελχο(ι)μι, Doric Hittite for λελαχοιμι, 'may I get,' or 'I should like to get,' reduplicated second aorist optative of λαγχάνω, 'obtain.' For οι spelled *u*, see § C15.

ni-an (*L.*, l. 14) = νεαν, 'new.'

sag[*-an*] (*L.*, l. 14) = σαγαν, Doric Hittite for σάγην, 'armor.' Also dative dual *ša-ga-in* = σαγαιν, *Yuzgat,* p. 7.

du-ši (*L.*, l. 14) = δοσιν, the accusative of δόσις, 'gift.' For (-ν), see § B2, 3; for the assibilation, § B2, 7. δοσιν is here used like δῶρον, that is, as a predicate appositive to σαγαν. The specification of the desired gift is not something peculiarly Doric, as Giles suggests (§ C4, n). It accords with the general custom among oriental kings in those days.

ka-a-aš-ma-ta (*L.*, l. 15) = κοσματωι (§ C15, *supra*), 'by the commissioner.' See *L.*, l. 11.

up-pa-ach-chu-un = ὕπαγον, 'I have sent.' See *L.*, ll. 23–24.

1 (*L.*, l. 15) = ἕν, 'one.' At the head of the list of gifts (lines 30–38) this numeral and the two following words are repeated, and it is very interesting to observe that the numeral is there followed by the phonetic complement *en.* This is explained by Knudtzon (*ZAB.*, p. 32) as an echo of the last syllable of *ištên,* the Babylonian-Assyrian word for 'one.' To me it seems much more likely that it echoes the Hittite word ἕν, 'one.' The masculine ἧς, attic εἷς, occurs in the Song, line 11.

su-cha (*L.*, ll. 15, 30) = ζυγον or ζυγος, 'pair.' *1 sucha* = 'one pair,' 'a couple,' 'two,' with a following plural noun; compare German *ein Paar Schuhe* and English *one dozen eggs.* With ζ spelled *s* compare σ spelled *z, na-ma-za, S.*, l. 22. For loss of final consonant, see § B2, 2 and 3.

šeš-li-ia[17] (*L.*, l. 15) = σεσλιον; cp. σηλία, 'water vessels.' The word σήλιον is recorded only by Hesychius and as 'a small vessel used by bakers.' I find no account of it in the etymological dictionaries; compare, however, Latin *seria,* 'a large earthen vessel,' whose origin, too, is undetermined.

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[17] For the cuneiform characters, see § C21.

If these words are related, they would seem to point to some foreign source. Forcellini suggests Hebrew *sir,* 'olla.' Such vessels were often sent abroad by way of commerce or as gifts, just as Tarcondorous sent these, and in this way their names, too, were likely to spread to foreign lands. But the medial σ of this early Greek form would make it likely that Latin *seria* was from *ses-i-ā,[18] and σήλια from *ses-li-ā, whatever the source of (*t*)*ses-* might be. Moreover, σηλιον from σεσλιον is the Doric form of Attic *σείλιον, and it should therefore be accented σηλίον. This also accounts for the preservation of the ι. Besides costly vessels, fine cloth and rich robes were sent abroad in such ways and were accompanied by their names. It is usual to regard Greek χιτών as derived from Hebrew *ketonet,* but Assyrian *kitû,* which is frequently found in the list of gifts[19] as an ideogram from 'gown,' would seem to be the more likely source.

AZAG-GI-ru (*L.,* l. 15), probably = χλωροο, 'of gold,' 'golden.' *azag-gi* is one of the ideograms for 'gold.' The character that represents the ending may spell *aš, rum, ru, dil, til,* or *ina.* The *-aš* might represent Greek -ας or -ος; but neither would do for χρυσοο, the genitive of χρυσος, 'gold.' We must therefore seek some other word. If we assume that the Doric-Hittite word for 'gold' might be akin to Phrygian γλουρεα or γλουρος, 'gold,' two possibilities arise: (1) that the word was declined like γλουρεα and had -ε(ι)ας in the genitive; (2) that it was declined like γλουρος and ἄργυρος, 'silver' (Sanskrit *árju-na-m,* 'silver,' neuter of *árju-na-ḥ,* 'white'), and was no other than χλωρός, 'yellow,' and thus a cousin of English *gold,* Sanskrit *hāṭakam* (from *haltaka híraṇyan, 'gold,' etc.). In the latter case the cuneiform character that spells the suffix must have had its variant value *-ru/-ro,* that is, -ροο, whence the familiar -ρου. And this, I think, is right. Nevertheless, it is only fair to acknowledge that all that is certain is that we here have a word that meant 'gold,' and that its genitive ended in -ας, -ος, or -ροο/-ρου.

dmq-an-ta (*L.,* l. 16) = τυχοντα (participle of τυγχάνω, (ἔ)τυχον), 'full weight,' literally, 'hitting the mark.' In lines 30–31 we are told that the vessels weighed 20 minae, that is, 10 minae each. For the confusion of *m, w, u,* see § C5.

a-ni-ia (*L.,* l. 17), *an-i-ia* (*S.,* l. 22) = ἀνια, 'grief.'

at-ta-aš (*L.,* l. 17), the genitive of ἀττα, 'mother,' Sanskrit *attâ,* 'mother,' 'aunt'; compare the usual ἄττα, 'father,' and see the following:

ma-mu (*L.,* l. 17) = μᾶμοο or μαμμοο, the genitive of μᾶμος or μαμμος, 'father,' Sanskrit *māmaḥ,* 'uncle'; compare the more usual μάμμη, 'mother,' and πάππος, 'grandfather.'

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[18] For the cuneiform characters, see C10 ff.

[19] Not here interpreted.

ku-e (*L.*, l. 17) = *q*ε, the later τε, 'and,' pictographic Hittite *q*ε. Also *S.*, l. 24.

da-aš (*L.*, l. 17) = τας, *Doric for* τῆς, feminine genitive of the demonstrative, literally, 'of her,' but used as the possessive adjective 'her,' as we use the old genitive *his.*

cha-at-ra-a-š (*L.*, l. 17), κατράς, Doric accusative plural of κατάρα, 'curse.' The Doric accent on the last syllable is betrayed by the loss of the medial α, which is accented in Attic but not in Doric. For the last two cuneiform characters, see § C21.

u-ub-bi (*L.*, l. 18) = ὑπι, 'down upon,' new mate of ὑπό, with the locative-demonstrative -ί found in ἐπί, ἐνί, περί, etc. Compare the locative-demonstrative *-s* in Latin *s-ubs,* and both *-s* and *-i* in ὕψι; also dialectic ὑπά with Homeric ὑπαί. With ὑπι/ὑπό, compare ἀπι/ἀπό (*S.*, l. 14), and see *ku-in, L.*, l. 13. For the meaning, compare Sanskrit *úpa* with the locative, and Avestan *upa* with the accusative, as also ὑπέρ, etc.; and see Walde under *sub.* Our ὑπι, 'down upon,' forms a normal bridge from ὑπό, 'under,' 'from under,' to ὑπέρ, 'over,' and ὕψι, aloft.' See also Brugmann, *Grundriss*^{2}, Vol. II, Part II, p. 912. Compare ὑπαγω from ὑπι-αγω (*L.*, l. 18, below) with ὑπαγω from ὑπο-αγω (*L.*, l. 15).

wa-ra-at-mu (*L.*, l. 18) = ϝαρατμον, from ἀραϝατμον, *m̥o*-superlative of ἀρᾱτός, 'accursed.' It is obvious that our adjective, which limits the feminine noun Νηθω, has the inflection of an "adjective of two endings."

Ne-it-ta (*L.*, l. 18) = Νηθω (Wright, *Gr. Gr.*, p. 341), accusative of Νηθώ, 'the spinner,' 'fate,' from νήθω, 'spin,' like Κλωθώ, 'the spinner,' 'fate,' from κλώθω, 'spin.'

up-pa-ach-chi (*L.*, l. 18) = ὑπαγει (from ὑπι-αγω), 'will bring down upon,' with the force of the usual ἐπάγω; cf. ὑπι = ἐπί above (*L.*, l. 18). For ἀγω (*L.*, ll. 23–24) and ὑπαγω (*L.*, ll. 15, 28) in the sense of 'send,' see *L.*, ll. 23–24. In the two latter cases we evidently have to do with ὑπο-αγω and not with ὑπι-αγω.

EGIR (*L.*, ll. 18, 20; *S.*, l. 22), ideogram for 'after that,' 'next,' 'then.' In line 20, as also twice in *TG.*, p. 19, the ideogram is followed by the phonetic complement *-pa* (= *-po*), which makes it clear that we have to do with ἀφ' ὧ, Attic ἀφ' οὗ (χρόνου).

an-da (*L.*, l. 18) = ἀντα, 'against,' 'facing,' 'in view of.' Here the word is used with the value 'in view of,' 'in consideration of,' or 'for'; but it is simplest to render it 'on.' Compare our use of *against* (vulgar *agin*) in the sense of 'in anticipation of,' 'in preparation for.' Cf. *an-tu,* L., l. 25; also *anda,* 'with,' 'because of.'

na-aš-ta (*L.*, l. 19 = νοστοο, the later νοστου, genitive of νόστος, 'journey home.' Compare *nu-uš-ši* (*L.*, l. 14).

cha-lu-ga-tal-la-a (*L.*, l. 19) = καλογαθαλος, 'nobleman.' See *L.*, l. 12.

t-ti-in (*L.*, l. 19), Doric τιν, the fuller form of τι (*L.*, l. 8, etc.); see *mi, L.*, l. 3.

am-me-el-la (*L.*, l. 19), ὁμιλοι, 'let him associate himself with.' For ο and οι spelled *a*, see § C15. Compare also *am-me-el, S.*, l. 7. It will be observed that ὁμιλέω, which usually governs the dative, is here used with the accusative. So Pindar, whose speech was partly Doric, uses ἕπομαι with the accusative instead of the usual dative.

cha-lu-ga-tal-la-an (*L.*, l. 20) = καλογαθαλον, accusative of καλογαθαλος, 'nobleman.' See *L.*, l. 12.

EGIR-pa (*L.*, l. 20) = ἀφ' ὥ, Attic ἀφ' οὗ, 'then.' See *L.*, l. 18.

Chat-ra-a (*L.*, l. 20) = *Ϙ* əτρα, or *Ϙ*ατρα, the neuter plural of the adjective 'Pterian,' or 'Hittite,' corresponding to Javonian *Ϙ*τερα and Πτέρια.

chu-u-da-a (*L.*, l. 20) = κυτα, Doric for κύτη, 'hides.' The reference is to a propitiatory offering to Tešup-Pan, the weather god, the god of mountainous country and of the solitudes of the desert. He it was who was responsible for the dangers and terrors that beset the traveler, and to him offerings were made by prospective travelers that he might be gracious to them and guide them aright.[20] For such an offering of a lion's pelt, see *Anthologia Palatina*, VI, 57, 3. (Not accessible to me.)

ak-na (*L.*, ll. 20–21) = ἀγνα, neuter plural of ἀγνος, 'sacred.'

i-na-a (*L.*, l. 21) = ἱνα, 'there,' that is, before starting on the journey from Arsama to Egypt.

t-ú-wa-an-du (*L.*, l. 21) = θυοιντο, 'let them be offered.' The spelling *u-w* may represent only υ; or the *w* may reflect a hiatus bridge from the high-back vowel *u* to the following vowel, such as is often heard in English[21] words like *po(w)etic* and *howso(w)ever* (dialectic *howsomever*) and in German *ru(w)inieren* (dialectic *ruminieren*). For οι spelled *a*, see § C15, supra.

We see here Tešup-Pan (*OD.*, p. 188) in the capacity of the god of the mid-day heat and of rain.[22] Like Apollo, he slays with his scorching heat but will send refreshing rain to those who propitiate him. For travelers about to make the overland journey from Egypt to Asia Minor or from Asia Minor to Egypt, the dread of the heat of the desert lands must have been considerable.

Nu-ut-ta (*L.*, l. 22) = νοτοι, 'the moist winds from the south, regarded as harbingers of fog and rain.' Etymologically, the word νότος would appear to be from *σνοτος and thus identical with our word *south*

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[20] Gruppe, *Griechische Mythologie*, etc., p. 1394.

[21] The *w* that thus arose in *no(w)one* became established as the initial sound of *one* in all positions, but not in the derivations *alone, atone,* and *only*.

[22] Gruppe, *op. cit.*, pp. 1391–92.

(< **sunþas*). For *u* and *a* as spellings for ο, see § C12; for neglect of the ι of οι, see § C15.

ú-wa-an-zi (*L.*, l. 22) = ὑονσι, Doric Hittite for ὕουσι, 'they (will) send rain.' For -νσι, see § C2, *7a*; for the tense, see *L.*, l. 13; for *u-w* spelling υ, *L.*, l. 21, *t-ú-wa-an-du*.

ú-da-an-zi (*L.*, l. 22) = ὑδονσι, Doric Hittite for ὑδοῦσι, 'they (will) do honor to.' Cf. χοονζι, *S.*, l. 11, and ὑδοονζι, *S.*, l. 24. For ο < εο, see § B1, 5.

tuš-ša-ta (*L.*, l. 22) = τοσαυταν, Attic τοσαύτην, 'distinguished,' literally, 'so great.' For *a* spelling αυ, see § C15.

ti, see *L.*, l. 3.

cha-lu-ga-tal-aš and *cha-lu-ga-tal-la-š* (*L.*, l. 23) = καλογαθαλος, 'nobleman'; see *L.*, l. 12.

mi-iš (*L.*, l. 23) = μις, 'my'; see *L.*, l. 3.

a-ku-iš (*L.*, ll. 23, 24) = ἀγοις, '(whom) you (may) send.' Observe that the accusative of the relative is omitted, as often in English—or not yet employed, καλογαθαλος being at once the subject of ἐλοι and the object of ἀγοις. ἀγω, which we know in the sense 'lead,' 'bring,' here means 'send'; compare Latin *ago*, 'drive.' Compare also ὑπαγον, 'I sent,' and ὑπαγει, 'will bring down upon,' *L.*, l. 18.

tu (*L.*, l. 24) = τυ, Attic σύ, 'you.' Cf. *tu* (*S.*, ll. 8, 11) and *du-u* (*L.*, l. 7).

el-ú (*L.*, l. 24) = ἐλοι, Doric-Hittite optative of ἐλαω or ἐλοω, 'drive,' 'drive away.' For loss of α or ο, see § B1, 5; for *u* spelling οι, see § C15.

it-na-aš (*L.*, l. 24) = ἰτνος, the Doric-Hittite preconsonantal accusative plural of ἰταμός, 'bold,' 'reckless.'

ag-ga-aš (*L.*, l. 24) = ἀγος, the corresponding Doric-Hittite form of ἀγός, 'leader,' here referring to the captains of brigand bands that they might encounter on the way. The letters found at Tell el Amarna contain frequent reference to attacks made upon caravans by marauding bands.

nu-mu (*L.*, l. 25) = νωμω, Doric Hittite for νωμάω, 'distribute,' 'deal out,' here with the secondary meaning 'provide,' 'furnish.' For the tense, see *L.*, ll. 13, 22.

an-tu (*L.*, l. 25) = ἀντα, 'against them,' *L.*, l. 18, and § B18.

uch-šu-uš (*L.*, l. 25) = ὀξυς, the real (Wright, *Gr. Gr.*, p. 176) accusative plural masculine of ὀξύς, 'sharp,' 'quick,' 'clever,' here 'adroit,' or 'capable.'

ga-aš-ga-aš (*L.*, l. 25) = χαος-χαος, reduplicated form of χαος, the Doric-Hittite accusative plural masculine of χάϊος/χαός, 'genuine,' 'good,' 'true,' here 'trustworthy,' a Laconian-Doric word. It will be observed that χαός is Doric in form, as distinguished from χάϊος. In the great majority of cases such an adjective has a long ultima. This would bring the accent to the penult, and in Doric to the ultima, the pretonic ι regularly falling out.

kúr-ia-aš (*L.*, l. 25) = κυριος, Doric-Hittite accusative plural of κυρίος, Attic κύριος, 'lord,' 'master,' 'guardian,' here 'guard.' The preservation of the ι in this word, as contrasted with the foregoing, is due to the fact that in Doric the accent fell upon it.

ub-bi-iš-ta-du (*L.*, l. 25) = ὑφισταιτο, impersonal verb, literally, 'may it support' = 'may there be support,' best rendered personally, 'may they support.' For the spelling of the diphthong αι, see § C15. For the final cuneiform character, see § C21.

aš-šu-un (*L.*, l. 25) = ὧς ἀν, 'as though.' For *a* spelled *u*, see § C12.

Zi-in-nu-u (*L.*, l. 25) = Ζηνος, genitive of agent, with final -ς lost before a consonant (§ B2, 2). It is interesting to find the "new" analogical genitive Ζηνος at so early a date. Observe the lack of ὑπο or other preposition with the genitive of agent.

k-chu-u-ma-an-da (*L.*, l. 26) = κομοντο, Doric Hittite for ἐκομέοντο/ἐκομοῦντο, 'they were cared for,' imperfect passive of κομέω. For accent and loss of ε, see § B1, 5.

nu (*L.*, l. 27) = νυ, 'now.'

cha (*L.*, l. 27) = και, 'and,' or possibly γα (spelled *q-qa*, *L.*, l. 7), Doric form of γέ.

ad (*L.*, l. 27) = ἀδ, 'to.' Latin *ad*, 'to,' 'at.' Venetic *ad*, 'at.' Old-English *æt*, 'to,' 'at.' Here used with the genitive.

du-š (*L.*, l. 27) = τυς or τους (genitive of τυ, 'you'), from the τευς or τεους, still found in other Doric.

a-aš-ša (*L.*, l. 27) = ἀσσα, Attic ἄττα, 'some.' Compare ἅσσα, *L.*, l. 28, below.

kúr-re (*L.*, l. 27) = κυρεα, Attic κύρη, 'securities,' here 'pledges,' 'gifts.' The ε is preserved because the accent falls on it in Doric. For εα spelled *e*, see § C15.

i-ga-it (*L.*, l. 27) = ἱκοιτ, 'may (pledges) come.' For τ, see § B2, 9.

nu-u (*L.*, l. 28) = νυ, 'now,' an echo of the νυ in the line above. We, instead, repeat the *and*.

t-at (*L.*, l. 28) = δοιτ, corresponding to the (δι)δοι of Homer and Herodotus. δοιτ : διδοιτ :: *gnōsco* : γιγνώσκω.

ka-a-aš-ma (*L.*, l. 28) = κοσμωι, Attic κόσμῳ, adverbial dative = 'duly.'

bi-ib-bi-eš-šar (*L.*, l. 28) = πιπιστορ, 'knight,' literally, 'horse-wise,' 'expert in matters pertaining to horses.' Cf. ἱππεύς, ἱπποτρόφος, ἱπποβότης, etc. See *bi-ib-it*, *L.*, ll. 5, 9, and *iš-šar*, L., l. 29, and *aš-ra-ni-š*, *S.*, l. 25.

up-pa-chu-un (*L.*, l. 28) = ὕπαγον, 'I (have) sent'; see *up-pa-ach-chu-un, L.*, l. 15.

aš-šu (*L.*, l. 28) = ἅσσα, Attic ἅττα, 'whatever (things),' serving as the neuter plural of ὅστις, though of different origin. For *u* spelling α, see § C12.

up-pa[*-ak*]*-ki* (*L.*, l. 28) = ὑπαγει (from ὑπο-αγω), 'brings.' Compare *up-pa-ach-chi, L.*, l. 18 (from ὑπι-αγω), 'brings (will bring) down upon.'

iš-ša(*r*) (*L.*, l. 29) = ἱστωϱ, 'wise,' 'expert'; compare ἱστϱωνης, *S.*, l. 25.

ri-iš-ši (*L.*, l. 29) = ῥησει, 'as regards speech,' 'in speech.' For *i-i* spelling η, see § C7; for *i* spelling ει, see § C15.

cha-lu-ga-tal[*-la-a*] (*L.*, l. 29) = καλογαϑαλος, 'commissioner,' see *L.*, l. 12.

THE SONG OF LAPPAIOS

C21. The so-called "Shorter Arzawa Letter" is written on a tablet whose clay differs from that used in Egypt (Knudtzon, *ZAB.*, 31). It is not a letter, however, but a song of triumph in praise of Lappaios.

The first six lines of this remarkable early Greek poem are introductory. In the three opening lines the poet tells us of Lappaios' successful invasion of the land of the Javonian Hittites. In the succeeding three he announces that he will now sing the praises of Lappaios, and expresses the hope that the song will gratify the mighty one and render him gracious. The body of the poem is in the form of a song of triumph, put into the mouth of the chieftain himself, a song in which he glories in the sufferings he has inflicted upon "inviolable Pteria," and the humiliation which he brought upon her king.

C22. I do not understand the situation as a whole, nor am I certain that my translation is in absolute agreement with all the circumstances. The lack of the verb at the opening of line 17 is unfortunate. If we had it, we might know whether the Pterian king were still alive and ruling, waiting for the return of his messenger, and whether πακτοω was a real present or only a historical past. Lappaios speaks as though his presence at Cos was connected with his activities against the Javonians and as though it were not his home. His returning from Cos to "Asia" and his returning as master of Pteria would harmonize with this. But the question is, what was understood by Asia? Was it what we call Asia; was it the country east of the Mediterranean; was it this, together with Asia Minor; was it just Asia Minor; or was it only a part of Asia Minor, like Lydia and its neighborhood? The use of τη, 'there,' in line 9, would seem to imply that Lappaios was no longer in the land of the Javonians. In *OD.*, I urged that he was prince of Cos, and this may be true, though I do not feel as sure of it as I did. And I still cannot fit Lappaios into the history of the time if he is not the prince whose throne name was Ϙατροσελος, the founder of the Doric dynasty in Pteria. It would appear that our Song was written promptly after Lappaios' invasion of the land of the Javonians, and it seems not impossible that, in spite of the invasion and partial conquest of the Pterian empire, the Pterian king still sat on his throne. This would mean that the Song was written when Lappaios had returned to his home to enjoy a sort of triumph. He may even have left the larger part of his army in the land of the Javonians to complete the conquest and inflict "woes the most extreme in every hamlet there." It is to be hoped that the Hittite tablets still to be deciphered will throw light on these and similar interesting problems. I may add that I have not yet been able to clear up the Assyrian situation alluded to in the comparison, "Like you, O Assyria, they will bury their arrogance."

METER

C**23.** The meter of the "Song of Lappaios," like that of the verses on the Phaestos Disk, is anapestic. The feet, however, are not arranged in dipodies, but in verses of five feet each, the later very rare pentapody. As usual in metric anapestic verse, there are also admitted spondees and dactyls and a few proceleusmatics; in fact, half the feet are spondees. The anapest is found chiefly in the first three feet, and the dactyl mostly in the fifth, while the spondee dominates the fourth and is frequent in all the feet. The last line consists wholly of spondees. There are few irregularities, except that the *syllaba anceps* (⏓) is not restricted to the last part of the verse. The cesura occurs more often between feet than in a foot. It is found four times before the third foot, twice in the third foot, three times in the fourth, and three times scattering.

SONG OF LAPPAIOS

TEXT

1 A-ta-mu ki-i-[we]-it ^{m}Lab-ba-ia
'Αδαμο[ς] γεϝιετ Λαππαιο[ς]
2 ga me-mi-iš-ta qa-an-wa-an-na-aš
γα μεμιστο[ς] γανϝονος
3 iš-cha-ni-it-ta ra-a-tar I-ia-u-e-ni.
ἠσκανεετο ῥυτωρ 'Ιαϝενε[ς].
4 Nu-ú ^{m}Lab-ba-ia-an ú-ul cha-a-mi-
Νυ Λαππαιον ὀλ κομιζω.
5 ša. Ia-at me-mi-iš-ta-a-an a-ab-bi-ma-at-ta-an
'Ιοιτ μεμιστον ἀπημα[ν]τον
6 ú-ul ki-ít-ta-at.
ὀλ κιτοιτ.
7 Nu-sa-an cha-an-da-an ám-me-el Qar-tab-ia
Νυσαν Κανθαν ὁμελ Ϙατρια(?)
8 ša-an-chi-iš tú ši-na ta ú-ul-im-ma
στονχεες τυ σινα τα ὑλιμα
9 bi-ich-chi bi-ich-chi-i | t-ta.
ϝικι ϝικι τᾱι.
10 Nu-m[u-i] Lab-ba-ia-an EGIR-pa Chat-ra-a
Νομοει Λαππαιον ἀφ' ὡ Ϙατρα
11 Is tu amêl Aš-šu-mi-ia li-li-ma-a | ch-chu-u-an-zi.
'Ης τυ ὁμελ 'Ασσυμια λελημα χοονζι.

1. 'Αδαμο[ς], 'unconquered,' 'invincible.' γεϝιετ < *gau̯i̯et, Homeric ἔγαιε, 'rejoiced.' Λαππαιος, that is, native of Lappa.

2. γα, Doric form of γε. μεμιστος, 'mighty,' from μένος, 'might'; compare *sceles-tus, jus-tus.* γανϝονος < *ganuōnts, classical γανύς, 'rejoicing,' 'glad'; here, 'triumphant.'

3. ἠσκανεετο, 'penetrated' = εἰσικνεῖτο. ῥυτωρ, 'deliverer,' 'defender.' For α = υ, see § C12. 'Ιαϝενες, later 'Ιάονες, ῎Ιωνες, 'Ionians.'

4. Νυ, 'now.' Λαππαιον, accusative of Λαππαιος, line 1. ὀλ, 'in song,' a locative (Brugmann^{2}, Vol. II, Part 2, §§ 170, 174) of the ὀλ in line 6; the word is related to ὀλολύζω, 'cry aloud' (especially to the gods in prayer). κομιζω, 'I will celebrate,' literally, 'rescue.'

5. 'ἴοιτ, 'may it please,' optative of ἵημι, with athematic inflection; compare προσίημι, 'please.' μεμιστον, see line 1. ἀπηματτον, 'kindly disposed,' assimilated form of ἀπήμαντον.

6. ὀλ, 'song of triumph'; see line 4. κιτοιτ, 'may it render,' optative of κτιω, 'establish,' 'make,' 'render.' The usual κτίζω is a secondary formation with -ιζω by analogy to verbs ending in *-id-yo,* or *-ig-yo.* The original verb is reflected in ἀμφι-κτίονες.

7. Νυσαν Κανθαν, 'in Nysa [and] in Canatha,' with postpositive ἐν (see *OD.*, p. 194). ὁμελ, 'with,' and hence 'alike,' from *somel; cf. Umbrian *sumel,* Latin *simul.* Ϙατρια, 'Pteria'; the first two cuneiform characters are not sure. [Dr. Hempl also

SONG OF LAPPAIOS

Translation

1 The invincible one rejoiced, Lappaios

2 the exceeding mighty exultantly

3 invaded as a deliverer the land of the Javonians.

4 Now will I celebrate Lappaios in song.

5–6 May the lay please the mighty one and render him gracious.

7 In Nysa [and] in Kanatha alike, O Pteria,

8 thou shalt bemoan woes the most extreme

9 in every hamlet there.

10 Henceforth Pteria will recognize Lappaios.

11 Like you, Assyria, they will bury their arrogance.

suggests Καρτ[α]ϝια, a dialect variant. In any case the retention of the ι in the ending is puzzling; see *OD.*, p. 195.—F. A.]

8. στονχεες, 'shalt bemoan' = στοναχεῖς; for the spelling see § C13. τυ = συ. σινα, 'woes' = σίνη. ὐλιμα, 'the uttermost'; compare Latin *ultima* with the suffix *-tm̥o*.

9. ϝικι-ϝικι, 'in every hamlet,' Avestan *vīsi-vīsi*, 'in jedem Gau,' Sanskrit *viçe-viçe* (with *o*-stem ending), reduplicated locative of a consonant stem (Brugmann², Vol. II, Part I, § 25). [It may actually be a borrowed word, since the Hittites were in contact with Indo-Iranian peoples; see De Brunner, p. 18.—F. A.] ται, locative-dative, 'there.'

10. Νομοει, 'names,' 'will recognize,' corresponding to classical νομίζει. ἀφ' ὣ, 'henceforth'; *EGIR*, the ideogram for 'behind,' 'after,' is written alone (*S.*, l. 22) or with the phonetic complement *-pa* (*S.*, ll. 10, 13). Notice that final *-s* and *-n* are never dropped before *EGIR*, showing that the Greek word intended began with a vowel. Ϙατρα < Ϙατρια, 'Pteria'; see *OD.*, p. 195.

11. 'Ης τυ ὁμελ, 'like you' = εἷς συ ὁμελ. I cannot analyze this idiom; but compare εἷς καὶ ὁμοῖος. [ὁμελ is spelled differently in line 7, and *AMÊL* everywhere else seems to be a determinative, not a spelling. It would therefore be safer to take the *aš-šu-mi-ia* following as a plural meaning 'foes' or the like (ἀστυμιοι, 'oppidani,' although incorrect, would do for the sense), used as subject of the plural verb χοονζι.—F. A.] 'Ασσυμια, 'Assyria'; the μ for ρ may be graphic only. [The reading of the first two characters is uncertain.—F. A.] λεληημα = λῆμα, 'arrogance' (with reduplication). χοονζι = χοῦσι, 'bury.'

12 Nai dag-u-u | n-na-mu me-mi-an ab-bi-aš
Ναι ταγω νομοι μεμιον ἄπιος
13 EGIR-pa Cha-at-ṙa-a-i.
ἀφ' ὤ Ϙατραι.
14 Ki-i-kán ab-bi Ku-iš ap-šar-aš
Κιχον ἀπι Κοες ἀψορρος
15 Aš-za-a-i na-an an-pa[-la].
'Ασαι ναων ἀμφαλος.
16 Cha-at-ta-an-na-aš LUGAL-uš
Ϙατ[ρ]ανος KING
17 [desunt] na-aš-ta al-chiš-uš
[προσμηνε?] νοστο[ν] ἀλγεισος
18 aš-šu-ú-li pa-ach-ta an-ta-[di]
ἀσυλι πακτω ἀντα-θι
19 nu-ut-ta QAT-ZUN-uš ar-ra-ach-za-an-da
νωτα HAND ἀραξαντο[ς]
20 [aš-š]u-ú-li char-kán-du.
ἀσυλι καργοντο[ς].
21 Gi-ik-mu ap-šar-aš aš-šu-ú-li
Γιγνω ἀψορρος ἀσυλι
22 Cha-at-ra-a-i; Nam-ma-za šum-an; EGIR an-
Ϙατραι· Νωμασα συμον· THEN ἀνια.
23 i-i-a.
24 Ap-zun[-zi] ku-e ú-da-an-zi
'Αψονζι ϙε ὕδοονζι
25 nu-ne eš-ra-ni-š | al-qa Cha-at-ri eš-ki.
νυνι ἱσ[τ]ρωνες ἀλγα Ϙατρι ἰσχι.

12. Ναι, 'verily.' ταγω, Doric genitive of ταγός, 'commander' (see *OD.*, p. 204). νομοι, old preconsonantal form of νόμῳ (Hirt, p. 347, *A*.5; Wright, p. 166). μεμιον = μᾶμιον = μηνιον (influenced by μένος, 'spirit'), 'I was angry with.' ἄπιος, 'far off.'

13. ἀφ' ὤ, 'thereupon'; see *L.*, l. 10. Ϙατραι = Πτερίᾳ, dative with μεμιον.

14. κιχον = ἔκιχον, 'I reached,' with the genitive 'Ασαι. ἀπι, a by-form of ἀπό, 'from, *OD.*, p. 208. Κοες, 'Cos,' *OD.*, p. 191. ἀψορρος, 'returning.'

15. 'Ασαι = 'Ασίας (*OD.*, p. 203); for this genitive ending cf. Ϙατραι, *S.*, l. 22, but notice ἀττας, *L.*, l. 17. ναων, 'in ships.' ἀμφάλος, 'sea-girt' = ἀμφίαλος, with loss of pretonic syllable.

16. Ϙατρανος, 'Pterian'; for the ending cf. *Romanus*. *LUGAL*, ideogram for 'king.' [Dr. Hempl, in his Greek version, has the word πετρος (apparently, 'rock,' 'mighty one'), which fits the meter but is otherwise unsatisfactory.—F. A.]

17. προσμηνε, 'awaited,' would fit the meter and sense. νοστον, 'return'; see *L.*, ll. 14, 19, and notes. ἀλγισος, genitive of ἀλγις, 'messenger,' *L.*, l. 13.

18. ἀσυλι, 'inviolate,' a genitive in -ῑ; compare νοσσι, *L.*, l. 14, and ἰσχι, *S.*, l. 25. πακτω = πακτόω, 'bind.' ἀντα-θι, 'against.'

19. νωτα, 'back,' the plural of νῶτον, which is frequently used for the singular.

12–13 Yea, according to the custom of a commander far from home
I then vented my wrath upon Pteria.

14 Returning from Cos I reached

15 Asia in ships sea-girt.

16 The Pterian King

17 awaited the return of his messenger

18 inviolate; [while] I bind across

19–20 his back the hands of the inviolate one, he dashing furiously about
and crying aloud.

21 I return master over inviolate

22–23 Pteria. I did my will; then was there grief.

24–25 Poets will now begin and celebrate the distress of the Pterian
might.

QAT-ZUN is an ideogram meaning 'hand,' and was probably read as χειρας; the complement *-uš* shows that a plural is meant. ἀραξαντος, 'beating,' 'dashing' (ἀράσσω).

20. ἀσυλι, see *S.*, l. 18. καργοντος = κραγοντος, 'screaming,' 'clamoring.'

21. Γιγνω, 'I am master over'; the active used in the sense of the middle γίγνομαι, just as in early Latin we find actives used for what later were deponents. ἀψορρος, 'going back,' 'returning.' ἀσυλι; the word *aš-šu-ú-li* might be the dative feminine of ἄσυλος, 'inviolable' (*S.*, l. 18), of ἄστυλος, 'propless,' or of ἄστολος, 'unrobed,' 'naked.' The feminine adjective apparently has assumed a third-declension ending; compare *Q*ατρι, *S.*, l. 25.

22. *Q*ατραι, dative of *Q*ατρα, *S.*, l. 10. For the dative with γίγνομαι, see Delbrück, *Syntax,* I, 133, and compare the usage with ἀνάσσω. Compare also the construction in *S.*, ll. 12, 13. νωμασα, 'I wielded,' 'exercised.' For the lack of augment compare μεμιον, *S.*, l. 12, and Wright, *CGG.*, p. 430. συμον = ϑυμόν, 'my will.' *EGIR,* see *S.*, l. 10 and note.

23–24. ἀνια, 'grief,' 'sorrow'; the ι being long was not lost. ἀψονζι, Doric for ἄψουσι, 'they will take hold,' 'begin'; compare German *anfangen.* *q*ε, 'and,' see *L.*, l. 17. ὑδoονζι 'celebrate,' see *L.*, l. 22.

25. νυνι, 'now.' ἱστρωνες, Doric for ἱστράωνες, 'learned man,' Brugmann^2, Vol. II, Part 1, § 226, 2. The Greek word ἱστρίων, 'learned man,' 'writer,' passed into Latin, where it got the meaning of 'dramatic writer,' 'actor.' It is not likely that the Latin word came by way of Etruria, for in Etruscan the *i* would have disappeared. ἀλγα, plural of ἄλγος, -εος, 'sorrow,' 'pain.' *Q*ατρι, 'Pterian.' ἰσχι from ἰσχυί, dative of ἰσχύς, 'might,' 'power.'

WORD LIST

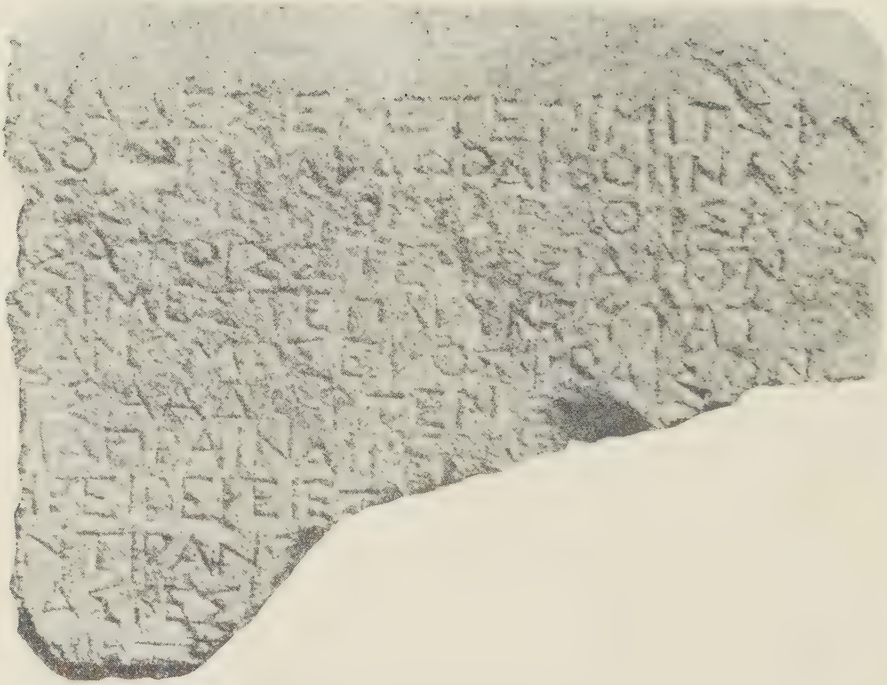
L. and *S.* refer, respectively, to the "Letter of Amenophis III" and the "Song of Lappaios"; the references are to lines. *G.* = the Trilingual Glossary; the references are to sections of the study entitled "Hittite Doric." (B, above.) An oblique line / at the beginning of a word indicates that the initial letter of the word is the last half of a syllable.

a-a-an-za *G.*, 20
a-a-ra *G.*, 16.1
ab-bi *S.*, 14
ab-bi-aš *S.*, 12
a-ab-bi-ma-at-ta-an *S.*, 5
ad *L.*, 27
ag-ga-aš *L.*, 24
ak-na *L.*, 20
/a-ku-iš *L.*, 24
ál-chiš *L.*, 13
al-chiš-uš *S.*, 17
amêl *S.*, 11
am-me-el *S.*, 7
am-me-el-la *L.*, 19
an-da *G.*, 18; *L.*, 18
an-na-an-na-aš *G.*, 15
an-ni-ia *L.*, 17
a-ni-ia-an *G.*, 12.6
an-pa-la *S.*, 15
an-ta[-di] *S.*, 18
an-tu *L.*, 25
ap-pa-tar *G.*, 17
ap-šar-aš *S.*, 14, 21
ap-zun[-zi] *S.*, 24
a-ra-ach-za-an-da *S.*, 19
ar-ku-u-wa-ar *G.*, 21
ar-nu-war *G.*, 17.5
aš-šu *L.*, 28
aš-šu-ú-li *S.*, 18, 21
[aš-š]u-ú-li *S.*, 20
aš-šu-mi-ia *S.*, 11
as-sụ-un *L.*, 25
aš-za-a-i *S.*, 15
a-ta-mu *S.*, 1
at-ta-aš *L.*, 17

a-ú *L.*, 12
bi-ib-bi-eš-šar *L.*, 28
bi-ib-bi-it *L.*, 5, 9
bi-ich-chi bi-ich-chi-i/ *S.*, 9
bi-ra-an *G.*, 12.4, 13
bu-nu-uš-ki-u-wa-ar *G.*, 17.2*a*
bu-nu-uš-šú-u-wa-ar *G.*, 17.2*b*
cha-a-mi-ša *S.*, 4
cha-at-ra-a-i *S.*, 22
cha-an-da-an *S.*, 7
cha-at-ra-a-i *S.*, 13, 22
cha-at-ra-a-s/ *L.*, 17
cha-at-ri *S.*, 25
cha-at-ta-an-na-aš *S.*, 16
cha-lu-ga-tal[-la-a] *L.*, 29
cha-lu-ga-tal-la-an *L.*, 12, 20
cha-lu-ga-tal-aš *L.*, 23
cha-lu-ga-tal-la-a/t-ti-in *L.*, 19
char-kán-du *S.*, 20
Chat-ra-a *L.*, 20; *S.*, 10
/ch-chu-u-an-zi *S.*, 11
chu-u-da-a *L.*, 20
chu-u-ma-an *G.*, 12; *L.*, 7, 10
da-aš *L.*, 17
dag-u-u/ *S.*, 12
dam-an-ni *L.*, 13
da-me-e-da *G.*, 16.3
dmq-an-ta *L.*, 16
dmq-in *L.*, 3, 6, 7, 10
du-š/a *L.*, 27
du-ši *L.*, 14
du-ug-ga *L.*, 7
e-eš-mi *G.*, 15
e-eš-šá-i *G.*, 12
e-eš-tu *L.*, 10

e-eš-zi *G.*, 14.2
el-u *L.*, 24
eš-ki *S.*, 25
eš-ra-ni-š/ *S.*, 25
ga *S.*, 2
ga-an-wa-an-na-aš *S.*, 2
ga-aš-ga-aš *L.*, 25
gal-gal-aš *L.*, 7
gá[n] *G.*, 18.2
gi-ik-mu *S.*, 21
ia-at *S.*, 5
i-ga-it *L.*, 27
i-ia-an-zi *G.*, 21 (Yuzgat)
^{m}I-ia-ra-sí-ia-áš *G.*, 13.4
i-ia-u-e-ni *S.*, 3
i-ia-zi *G.*, 21
im-pa-u-wa-ar *G.*, 18.2
i-na-a/tú *L.*, 21
^{m}Ir-ša-ap-pa *L.*, 11, 29
is *S.*, 11
iš-cha-ni-it-ta *S.*, 3
it-na-aš *L.*, 24
ka-a-aš-ma *L.*, 28
ka-a-aš-ma-at-ta *L.*, 11, 15
kán-an-da *L.*, 3
kat-ta *L.*, 7
kat-ti *L.*, 3
/k-chu-u-ma-an-da *L.*, 26
ki *L.*, 29
ki-i-kán *S.*, 14
ki-it-ta-at *S.*, 6
ki-i-[we]-it *S.*, 1
ki-nu-un *G.*, 11.6
ku-e *L.*, 17; *S.*, 24
ku-id *G.*, 11
ku-in *L.*, 13
ku-iš *G.*, 11; *S.*, 14
kúr-e *L.*, 27
kúr-ia-aš *L.*, 25
ku-ru-ur *G.*, 17.1
ku-un-nu-war *G.*, 17.6
ku-uš-ša-an *G.*, 11
ku-uš-šá-ni *G.*, 12
ku-ut-ti *G.*, 12.4
Lab-ba-ia *S.*, 1
Lab-ba-ia-an *S.*, 4, 10
li-il-chu-mi-i *L.*, 14
li-li-ma-a *S.*, 11
lu-us-ki-u-wa-ar *G.*, 17
ma-an *G.*, 23
ma-mu *L.*, 17
ma-ni *L.*, 12
me-ik-ki *G.*, 16
me-mi-an *S.*, 12
me-mi-iš-ta *S.*, 2
me-mi-iš-ta-a-n/ *S.*, 5
mi *L.*, 3, 4, 5, 13
mi-in *L.*, 12
na-an *S.*, 15
na-aš-ta *L.*, 19; *S.*, 17
na-at-ta *G.*, 19, 21
na-i *S.*, 12
nam-ma-za *S.*, 22
ne-it-ta *L.*, 18
ni-an *L.*, 14
/n-na-mu *S.*, 12
nu *G.*, 11.5
nu-cha *L.*, 27
nu-mu *L.*, 25
nu-m[u-i] *S.*, 10
nu-ne *S.*, 25
nu-sa-an *S.*, 7
nu-ú *S.*, 4
nu-uš-ši *L.*, 14
nu-u/t *L.*, 28
nu-ut-ta *L.*, 22; *S.*, 19
pa-ach-ta *S.*, 18
pa-a-u-ar *G.*, 18.2
pa-ba-ri *G.*, 12.3
pa-ra-ra *G.*, 18.2
Qar-tab-ia *S.*, 7
ra-a-tar *S.*, 3
ri-iš-ši *L.*, 29
šá[-ak]-ki *G.*, 17.3

ša-an-chi-iš *S.*, 8
š/a-aš-ša *L.*, 27
sag-an *L.*, 14
š/al-qa *S.*, 25
še-li-ia *L.*, 15
ši-na *S.*, 8
su-cha *L.*, 15
šum-an *S.*, 22
šú-u-wa-an *G.*, 16.4
ta *S.*, 8, 9
ta-at-ta *G.*, 17.4
/tat *L.*, 28
ta-ru-ub-bi-eš-šar *G.*, 18.1
ta-ru-ub-bu[-u]-ar *G.*, 18
ti *L.*, 8, 9, 22
tin *L.*, 19
tu *S.*, 8, 11, 24; *L.*, 24; *G.*, 10
tus *L.*, 27
tu-ri-ia-an-za *G.*, 12.5
tuš-ša-ta *L.*, 22
tú-wa-an-du *L.*, 21
ub-bi *L.*, 18
ub-bi-iš-ta-du *L.*, 25
ú-da-an-zi *L.*, 22; *S.*, 24
uch-šu-uš *L.*, 25
u-i-e-nu-un *L.*, 11
up-pa-[ak] *L.*, 28
up-pa-ach-chi *L.*, 18
up-pa-ach-chu-un *L.*, 15
up-pa-chu-un *L.*, 28
uš-ta-áš-šá-an *G.*, 17.5
ut-ta-ni-i-za *G.*, 22
ú-ug-ga *G.*, 15
ú-ul *S.*, 4, 6; cp. *G.*, 19
ú-ul-im-ma *S.*, 8
ú-wa-an-zi *L.*, 22
u-wa-da-an-zi *L.*, 13
wa-al-ki-iš-šá-ra-áš *G.*, 16.5
wa-ra-at-mu *L.*, 18
za-ak-kar *G.*, 12.1
zi-in-nu-u/ *L.*, 26



THE PRAESOS INSCRIPTION
(See page 107)

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IV. Etruscan

V. Venetic

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TO FRIEDRICH KLUGE

IN FREIBURG, BADEN

Many years ago, at Jena, you taught me, in lecture-room and on strolls along the Saale, to trace the threads that go to make up the fabric of old Germanic speech and life, and not to stop though they led me into distant parts and others' fields of labor. Decades have passed and I have wandered far, far over the earth and far afield in my studies. I have not seen your face again, nor heard your voice; but when rumors spread abroad that I had presumed to solve the unsolvable, though others scoffed or kept silent, you sent me words of congratulation and encouragement. A cruel fate has dimmed for you the light of the sun and robbed me of half my sight; but we are not, I take it, to be pitied as are they who have eyes but do not see, and ears but do not give heed.

The nations have been at war, the earth is rent with their strife, and the seeds of future misery and discord are sown broadcast. But though time strides apace and national aims diverge, the helping hand and the cheering voice are not forgotten. And so it is to you, my old teacher in far-away Germany, that I now am sending, from the other side of the globe, these first fruits of my Italic studies, knowing that they will not be the less acceptable to you because they do not deal with the Runic records of Angles or Norsemen or of wandering hosts of Goths or Burgundians. And with them go grateful greetings and the prayer that it may be given you long to live and throw light into dark places.

George Hempl

Stanford University
California

EDITOR'S PREFACE

[The following study is based principally upon a "Preliminary Report on Venetic and Etruscan," written in 1918, which Dr. Hempl intended to revise immediately after the appearance of his volume on "Hittites and Minoans." I have added to this manuscript a paper on the Lemnos Stone, some Grammatical Notes originally meant for a volume on "Lemnian Etruscan," and various excerpts from "The Tuscan Tung." In utilizing this material, however, I have made a great many changes. The Introduction as it now appears contains only one-half of the original, and has been added to from various sources, principally from a similar introduction found in the manuscript, "Etruscan Sister of Latin." The Grammatical Notes have been made somewhat fuller, and four inscriptions with their interpretations have been taken from "The Tuscan Tung." The latter is a rather large book which Dr. Hempl began in 1909, and to which he added continuously until about 1914. It is made up of a series of short studies and interpretations without any very systematic arrangement, and consequently could not be published without revision.

[As was the case with Number 1, publication of Number 3 of this volume is made possible by a generous grant from the Carnegie Institution of Washington, D.C.—F. A.]

Stanford University, California
July 1932

AUTHOR'S PREFACE

Anyone who has long worked at the rehabilitation of a language dead and forgotten knows better than to flatter himself that he has succeeded in all his efforts. Some of my earliest interpretations I later found to be ludicrously wrong; and to the last minute I have found occasion to change, correct, and rewrite. I do not conceal from myself that the time cannot be far distant when this pioneer volume will appear defective and out of date. In fact, the sooner that time comes, the greater will my satisfaction be; for it will signify a radical change in the study of the subject.

There is a common misconception of the meaning of the word "decipher" and of the activity of a decipherer. This is due to the employment of the word in connection with secret codes and is betrayed by the use of the term key in such a sentence as "I understand that you have discovered a key to the Etruscan inscriptions." According to this conception, the language is written in more or less obscure characters, which it is difficult to make out and disentangle, until one finds the "key"; after which all is clear sailing. In the case of an unread language written pictographically there is a modicum of truth in the conception, for the values of the symbols must first be determined. And the discovery of the penalphabetic character of Venetic script may be regarded as the key to the language. But in the case of cuneiform Hittite and the Greek script employed in writing Etruscan, such a conception is very far from the truth. In such cases the text is practically established and the problem consists in recognizing its signification, chiefly from the resemblance of the individual words to related words in other languages—precisely the process so vociferously and contemptuously condemned by orthodox authorities on deciphering. The interpretation of such texts as Etruscan and cuneiform Hittite is no simple unlocking of doors by the fortunate possessor of a "key." It is a process that taxes all one's resources, natural and acquired, and all one's devotion and patience.

I must express here my heartfelt appreciation of the confidence that friends have maintained in me through all these hard years, and of the patience with which they have waited for the publication that should ultimately justify their confidence to colleagues who thought the less of them for maintaining their faith in me and refusing to believe that I either was a second Dr. Cook or was no longer of sound mind. These faithful friends are scattered far and wide. Some of them, like Calvin Thomas and Edwin Fay, will never read these words of appreciation, for they have already set out on the last long journey. Of the living I wish to mention specifically three groups, my colleagues here at Stanford, my former colleagues at Michigan, and various members of the Germanic, Romanic, and English staffs at Harvard. To fail to note in this connection the unswerving faith and unceasing patience of my wife and children might seem to belie my deep sense of gratitude to them. It was the knowledge that I was right and that this would some day be recognized by philologists generally that gave me strength to hold out under manifold discouragements; but it was the realization that friends who had known me and my work in other days still believed in me that enabled me to preserve, in so far as I have, a serene mind and genial spirit.

To the authorities of the Carnegie Institution I am indebted for generous provision of books and other material. I also desire to make public acknowledgment of my appreciation of the loans made me, at the beginning of my Etruscan studies, by the library of the sister university at Berkeley. And I remember with gratitude that at that time Körte and Skutsch kindly consented to furnish me reprints of the articles "Etrusker," "Etruria," and "Etrusca Disciplina," written partly by them and partly by others. These reprints, bound into a handy little volume, I have always kept within easy reach, and I have derived from them invaluable information and assistance, in spite of the contrary attitude that the writers maintain on the Etruscan question.[1] Aside from this, the books that I have found most useful are the large Latin dictionaries (now sadly antiquated), Walde's *Lateinisches etymologisches Wörterbuch,* Sommer's *Handbuch der Lateinischen Laut- und Formenlehre,* and Buck's *Grammar of Oscan and Umbrian.*

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[1] I cannot refrain from urging that it would be a great boon to students of Etruscan if the publishers would reprint these valuable papers as an independent volume. In case they do, I would suggest that they use a larger type and a smaller page, but also indicate the pagination, paragraphing, and line-numbering of the original edition. A detailed index should by all means be added.

TABLE OF CONTENTS

IV. ETRUSCAN

PAGE

INTRODUCTION (§§ 1–19) 15

1. The author's Etruscan researches.—**2.** Methods; history of Etruscan studies.—**3.** The "Negative School."—**4.** Basis of their attitude.—**5.** Pauli's "pseudo-interpretations."—**6.** Citations from Pauli, Torp, and Herbig.—**7.** Illustration of the results achieved by negativists.—**8.** Illustration of their methods.—**9.** Their attitude toward similarities between Etruscan and Indo-European.—**10.** The Etruscan perfect in *-ce*.—**11.** Skutsch's arguments against its Indo-European character.—**12.** The *genitivus genitivi* or "genitive squared."—**13.** Supposedly non-Aryan traits: the "plural in *-ar*."—**14.** Feminines in *-i*.—**15.** Skutsch's arguments against the Indo-European character of genitives in *-es, -us, -as*.—**16.** Etruscan numerals; the Toscanella dice.—**17.** Proof that *ce* = 'five.'—**18.** Other Etruscan-Latin resemblances: *eϑ*; the goddess *"Eϑauśva."*—**19.** Conclusion.

NOTES ON ETRUSCAN GRAMMAR; SCRIPT AND SPEECH (§§ 20–38) *27*

20. Character of Etruscan script; no distinction of voiced from mute, nor of aspirate from pure stops.—**21.** Similar instances of ambiguity.—**22.** Supposed tendency toward aspiration and psilosis in Etruscan.—**23.** Aspirate stops represented in early Etruscan (F. 2341–2342).—**24.** Proof that Etruscan had voiced stops.—**25.** Proof that Etruscan had the vowel-sound *o*.—**26.** General remarks upon ancient writing.—**27.** Phonetic transcription.—**28.** Use of roman and italic types; accent marks.—**29.** Method of representing the original texts.—**30.** Classification of speech sounds.—**31.** Vowels and consonants.—**32.** Syllabic vowels and consonants.—**33.** Metathesis and the telephenomena in Etruscan.—**34.** Assimilation of consonants.—**35.** Haplology.—**36.** The Etruscan accent.—**37.** Lack of stress revealed by vowel changes.—**38.** Obscuration in unstressed syllables.

THE ETRUSCAN VOWELS (§§ 39–51) 38

39. Obscure vowels in Etruscan.—**40.** Vowels of the *a*-type.—**41.** Origin of Etruscan *ǭ*; conditions of the change *ā* > *ǭ*.—**42.** Vowels of the *e*-type.—**43.** Tendency for *e* to become *i*; ambiguous spellings.—**44.** Fracture of *ē* before *l* and *n*.—**45.** Mutation of *e* to *a* before syllabic consonants.—**46.** Obscuration and loss of unstressed *e*.—**47.** Final *-e*.—**48.** Origin of the Etruscan vowel *i*.—**49.** Origin of the vowel *o*.—**50.** Final *-ō*.—**51.** Etruscan *u*.

THE DIPHTHONGS (§§ 52–54) 44

52. History of Etruscan diphthongs; *ai* > *ęi* > *ę̄*, etc.—**53.** Development of Etruscan diphthongs compared with Oscan, Umbrian, and Latin.—**54.** Indo-European *eu* preserved in Etruscan.

PAGE

CONSONANTS (§§ 55–72) 47

55. Indo-European **bh* in Etruscan.—56. Indo-European **dh.*—57. Indo-European **gh, *ğh.*—58. Labiovelar consonants.—59. Labiovelars in Etruscan.—60. Delabialization; *cw* > *cl*; secondary *q, cw.*—61. Loss of final *-m.*—62. Loss of final *-s.*—63. Etruscan *s, ś, z.*—64. Loss of final *-t* > *-d.*—65. Final *-nt* > *-ns.*—66. Intervocalic *d* > *l,* save when initial in a stressed syllable.—67. Intervocalic *l* > *n.*—68. Palatalization of *l.*—69. Assimilation of *l* by a following *t.*—70. Vocalization of *l.*—71. Intervocalic *s* > *r.*—72. Vowel + *ns.*

MORPHOLOGY (§§ 73–93) 57

73. Conspectus of case-endings.—74. Nominative singular: *a*-stems.—75. Accusative singular.—76. The locative-genitive.—77. Locative-ablative singular.—78. Dative singular.—79. Nominative plural.—80. Accusative plural.—81. Genitive plural.—82. Dative-ablative plural.—83. Nominative singular: *o*-stems.—84. Accusative singular.—85. Genitive singular.—86. The genitive in *-al.*—86a. The genitive squared.—87. Ablative singular.—88. Dative singular.—89. Nominative plural.—90. Accusative plural.—91. Nominative-accusative neuter plural.—92. Genitive plural.—93. Dative-ablative plural.

THE ETRUSCAN NUMERALS (§§ 94–99) 65

94. The Toscanella dice (F. 2552) with words instead of dots.—95. Proof that *ci* = 'five'; the inscription *LV celc ceanuϑ*; the bilingual F. 251 *ciarϑialisa;* the sum in the Perusian Cippus.—96. Multiplicatives in *-z, -zi, -si,* etc.—97. The tens; the suffix *-lχ, -alχ.*—98. Radical elements of the numerals from *one* through *ten.*—99. The ordinals; origin of the suffix *-atrus.*

VARIOUS GRAMMATICAL NOTES (§§ 100–104) 72

100. Conjunctions.—101. Adopted words.—102. Etymology of Etruscan names.—103. Family names in (*n*)*a,* (*n*)*as.*—104. Feminine names in *-ī.*

THE LEMNOS STONE 78

Excursus I: *Serona;* Excursus II: *Siva.*

ETRUSCAN INSCRIPTIONS 99

East-Italian Etruscan; Campanian Etruscan; Cyprian Etruscan; Faliscan Etruscan; Etruscan of Caere; Perusian Epitaph; The Perusian Cippus; The Magliano Tablet; Late Egyptian Etruscan. Excursus III: The Roman Name; Excursus IV: The Prehistoric Wanderings of the Italic Tribes

ETRUSCAN WORD-LIST 147

V. VENETIC AND VENETIC INSCRIPTIONS

VENETIC 157

Venetic Script; Venetic Inscriptions; Venetic Word-List

GENERAL INDEX

INDEX TO VOLUME V 171

[ABBREVIATIONS AND WORKS CONSULTED

[See the general list on page 24 of Number 1. The various parts of this study are referred to as follows:

E. Paragraphs of the Introduction and the Notes on Etruscan Grammar.

EI. Etruscan Inscriptions, which are referred to by number. These numbers are always printed in boldface.

EEI. "Early Etruscan Inscriptions," a brief paper published in the Matzke Memorial Volume (Stanford University, 1911). An abstract of certain parts of it appears as an appendix to Etruscan Inscriptions.

LS. The Lemnos Stone. The *words* of the inscription are numbered consecutively, and references are to these numbers.

[OTHER WORKS

AIF. Pauli, *Altitalische Forschungen,* 3 vols. (Leipzig, 1885–86).

AIS. *Altitalische Studien, herausgegeben von Dr. Carl Pauli.* In five parts (Hanover, 1883–87).

CIE. *Corpus Inscriptionum Etruscarum.*

CT. The Capuan Tablet (*EI.,* No. **6**).

EFS. *Etruskische Forschungen und Studien,* von Dr. W. Deecke und Dr. Carl Pauli (Stuttgart, 1881 and following).

E.N. Torp, *Etruscan Notes.*

ES. *Etruskische Studien,* von Dr. Carl Pauli (Göttingen, 1879 and following).

F. Fabretti, *Corpus Inscriptionum Italicarum.*

F.I, F.II, F.III. Fabretti, Primo, Secondo, Terzo Supplemento.

Ga. Gamurrini, *Appendice al corpus inscriptionum italicarum.*

Herbig, "Bericht über die Fortschritte der Etruskologie für die Jahre 1894–1907," in Kroll's *Jahresbericht,* etc. (Leipzig, 1908).

LE. Schulze, "Zur Geschichte lateinischer Eigennamen," *Abhandlungen der königlichen Gesellschaft der Wissenschaften zu Göttingen,* Vol. V (Berlin, 1904).

MT. Magliano, "The Leaden Tablet of Magliano." See *Milani, Monumenti Antichi,* II, 37 ff.

Mu. J. Krall, "Die etruskische Mumienbänden des Agramer National-Museums" (*Denkschriften der Kaiserlichen Akademie der Wissenschaften in Wien, philosophische-historische, Klasse* XLI, 1892). References are to column and line.

PC. The Perusian Cippus (*EI.*, No. 19).

PW. Pauly and Wissowa, *Real-Encyclopädie der classischen Altertumswissenschaft* (1894 and following). References are to page and line of Volume XI of this work (1907). See note to paragraph 1, below.

T&H. Torp and Herbig, "Einige neugefundene etruskische Inschriften," *Proceedings of the Bavarian Academy, 1904.*

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Weege, *Etruskische Malerei* (Halle, 1921).

For an account of Lattes' *Lexicon of Etruscan,* see Nogara's review, *Rivista di Filologia,* 1919, pp. 279 ff. Also valuable is Cortsen, "Vocabulaire étrusque," *Nordisk Tidskrift för Filologi,* 4th series, VII, Part 1.—F. A.]

MEDITERRANEAN STUDIES

IV. ETRUSCAN

MEDITERRANEAN STUDIES: IV. ETRUSCAN

INTRODUCTION

1. I first succeeded in deciphering Etruscan[1] in December, 1908, and announced the fact in a paper sent to the Toronto meeting of the American Philological Association the same month. In 1911 I was induced by various friends to publish an abstract from the intended report. This abstract appeared in the Matzke Memorial Volume, under the title, "Early Etruscan Inscriptions." For this paper I unfortunately chose particularly three inscriptions that are reported only by the artist Piranesi, namely, F. 2343, F. 2344, and F. 2346–2345. Danielsson[2] soon after showed that one of these (F. 2344) had been constructed out of different genuine inscriptions. His efforts to prove something of the kind in the case of the other Piranesi inscriptions presented by me were as signal a failure as his success with F. 2344 was brilliant. Nevertheless, the natural effect of his paper was to throw serious doubt upon the authenticity of any Etruscan text that we owe to Piranesi alone, and thus to discredit my interpretation of all the inscriptions that I presented. Hence the need of evidence drawn from inscriptions of undoubted genuineness. The portion of the inscription on the Perusian Cippus that I now present (*EI.*, No. **19**) should surely alone suffice to answer for all time the question as to the character of Etruscan speech and to establish, on the one hand, the fact that Etruscan is the close kin of Latin and, on the other, to make it clear that the two languages are distinct and independent, that is, that such similarity as they possess is not to be explained by asserting, "dass es sich entweder um trügerischen Schein oder um Entlehnungen handelt," as Skutsch[3] persuaded his colleagues to believe. Moreover, it must now also become clear that all this was proved ten years ago, when I published my brief paper in memory of John Matzke. The two inscriptions, F. 2343 and F. 2346–2345, are extremely valuable specimens of early Etruscan,[4] the latter being a veritable gem, for the preservation of which we have reason to be sincerely grateful to Piranesi, however much we may deplore his inexcusable "monkeying" with F. 2344. Although I have extended my knowledge of Etruscan during the past ten years, all the most important elements of Etruscan phonology and morphology I had already determined when I published that first report, and I have observed nothing in my interpretations of F. 2343 and F. 2346–2345 that I would change. In other words, for a whole decade Etruscologists and classical philologists have had access to unique specimens of very early Etruscan and to a concise statement of the important laws of Etruscan grammar, but have not deemed it worth their while to consider them seriously.

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[1] The best general account of things Etruscan will be found in Pauly and Wissowa's *Real-Encyclopädie,* Vol. XI, 1907. This account consists of several papers: Hulsen, "Etruria"; Thulin, "Etrusca Disciplina"; Körte and Skutsch, "Etrusker." See also Norton's article, "Etruria," in the *Encyclopaedia Britannica* (1911), IX, 854 ff., to which is added Conway's brief article on the Etruscan language; and Kretschmer's article in Gierke and Norden's *Einleitung in die Altertumswissenschaft* (second edition, 1912), I, 556 ff. All these articles are written from the point of view of the "Negative School."

[2] Danielsson, "Zu den etruskischen Inschriften Piranesi's," *Minneskrift till Professor Axel Erdmann, 6 Febr. 1913.*

[3] Skutsch, *PW.,* 803.26.

2. In attempting to read an undeciphered language, one may avail himself of various methods of approach: (1) At times, but very rarely, inscriptions are accompanied by a more or less literal translation into some known language. Such double inscriptions are termed bilinguals. (See *EI.,* Nos. **1, 2.**) (2) Inscriptions may be so placed that it is obvious they pertain to the objects bearing them, or to adjacent pictures; and their meaning may thus be inferred with more or less exactness. In case the investigator has neither of these helps, he may proceed in one or both of two well-known ways. He may (3) employ the Comparative Method,[5] which consists in the attempt to associate the individual words with similar words in known languages. Or he may (4) use the Combinative Method, which consists in assembling the various instances in which a word, a prefix, a suffix, or a group of words is found, and in attempting to infer what meaning would best suit the various situations in which it occurs. Both methods are useful and legitimate. Each has its advantages and its disadvantages, and they often supplement one another. Lanzi[6] naturally made use of both and succeeded in determining the meaning of a few words and, with less success, their foreign cognates.

With the nineteenth century the study of Etruscan passed largely into German hands. Many attempts were made to identify the language, and almost every conceivable combination was tried. The most ambitious attempt was that of Corssen,[7] who undertook to prove Etruscan an Italic language closely related to Latin. But Corssen, although a learned and highly respected philologist, was not gifted with a scientific mind, and he permitted himself to make countless unwarranted assumptions and combinations. Even before the appearance of the second volume of his book, the worthlessness of his work was shown in a little pamphlet written by Deecke; and Corssen died of a broken heart. From now on, Deecke was the leading writer on the subject, and he still is hailed as "the founder of scientific Etruscology." His chief disciple was Carl Pauli, with whom he ultimately entered into literary partnership, when Deecke suddenly changed front and reverted to a position not very unlike Corssen's. For a time Deecke associated himself with Bugge of Christiania, one of the distinguished group of Scandinavians who began to devote themselves to the study of Etruscan and Venetic in the latter part of the nineteenth century. Bugge believed in the Indo-European (specifically Armenian) character of Etruscan. Torp and, more closely, Danielsson associated themselves with Pauli, as did also the German scholar Herbig, and later the Italian Lattes. Thus the headship of the old Deecke school passed over to Pauli, who zealously pushed it and its teachings. After Pauli's death in 1901, Skutsch became the chief champion of the Negative School, and codified its teachings in his famous article on the Etruscan language.[8]

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[4] [They are reproduced on page 141, below.—F. A.]

[5] Also called the Etymological Method.

[6] Died in 1810.

[7] [For the works of scholars mentioned in this section see the Bibliography.—F. A.]

3. The chief tenets of the Negative School are the dogma that Etruscan is not Indo-European and the belief that the comparative method cannot properly be employed in studying the language. Though Deecke had been largely influential in establishing the teachings of the school, as he later abandoned them, while Pauli adhered to them, elaborated them, and assiduously advocated them, it has come about that they are generally regarded as Pauli's rather than Deecke's.

4. The basis of the proscription of the comparative method of study is the belief that one who is deft in such matters can so manipulate a text that it may be made to appear to be anything that it is not. The implication is that there is no means of determining the soundness of such an interpretation, but that philologists stand helpless in the situation and can defend themselves only by totally forbidding the comparative method.

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[8] One of the principal reasons for the failure of my predecessors in the attempt to prove the kinship of Etruscan and Latin lay in the fact that, in practice, if not in theory, they thus strove to prove Etruscan to be a derivative of Latin, and not even of old Latin, but of the Latin they had studied in their school days. This led them to make combinations and suggest derivations that could not but heap ridicule upon their work and arouse contempt for their claims. My conception, on the other hand, has been, from the start, that we had to do with two closely related but wholly distinct languages; that neither was in any way derived from the other, but that, from very early days, each had gone its own way, independent of the other. Instead of looking specifically to Latin for light on Etruscan, I have looked to Italic (whether represented by Latin and Venetic or by Oscan and Umbrian), as also to other forms of Indo-European speech. And each one had something to tell me of the character of their sister Etruscan.

5. [Pauli declared that by the comparative method he could prove Etruscan akin to any language previously unknown to him, even one of the languages of Central Africa or the South Sea Islands, provided he were given time to acquire a superficial knowledge of the language chosen.[9] He actually took the trouble to construct two such "proofs," pretending in the one case[10] to show that Etruscan was akin to Balto-Slavic, and in the other that it was Italic.[11]—F. A.]

6. Etruscan is non-Indo-European. To question this is heresy. To ask to investigate the language as other languages are studied, namely, by the comparative method, is evidence of a wilful and presumptuous heart and a heterodox mind. The priestly bidding is: "Study Etruscan by itself; compare one Etruscan passage with another Etruscan passage, one Etruscan word with another Etruscan word; look neither to the right nor to the left, for only from Etruscan itself can light on Etruscan be obtained." They say: "Angesichts dieser Sachlage wird man also bei der Entzifferung der etruskischen Inschriften auf die Heranziehung irgend einer andern Sprache von vorn herein verzichten und die Sprache nur aus sich selbst heraus erklären müssen.[12] "Da diese [the combinative method] die richtige oder vielmehr die einzig mögliche ist, davon bin ich überzeugt."[13] "The only right way to understand the unknown language is to compare the written specimens left of that language with each other."[14] "Es muss möglich sein, das Etruskische wenigstens bis zu einem gewissen Grade ohne jegliche Sprachvergleichung aus sich heraus, durch Kombination verschiedener Inschriften, durch Erwägung des Zweckes der einzelnen Inschrift und ahnliche Mittel zu erklären."[15] And then Skutsch sharply calls Torp to task for peeping over the hedges as he wanders along the straight and narrow way.[16]

Finally, the genial Herbig: "Der immer wiederholte positive Versuch, das Etruskische als idg. Sprache wie das Lateinische, Oskische, Umbrische oder auch wie das Armenische zu erweisen ist immer wieder von neuem gescheitert, und aller Aufwand an Scharfsinn und Phantasie hat nicht ausgereicht, um auch nur den aller-primitivsten methodologischen Forderungen zu genügen, die wir selbst bei Einzelvergleichungen auf idg. Gebiet, bei Sprachen, deren Verwandtschaft schon feststeht, niemals ungestraft ausser Acht lassen dürfen. (Auch dem angekündigtem Werk The Tuscan

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[9] *AIS.* (1885), IV, 99–100.

[10] *AIS.* (1883), II, 142 ff.

[11] *AIS.* (1884), III, 131–135.

[12] Pauli, *AIS.*, IV, 101.

[13] Torp, *Etruskische Beiträge,* II, lv.

[14] Torp, *ibid.,* p. 4.

[15] Skutsch, *PW.*, 772.4 ff.

[16] Skutsch, *PW.*, 774.15–28.

Tung von George Hempl ist, nach der im Matzke Memorial Volume, Stanford University, California 1911 erschienenen Probe zu urteilen, in dieser Hinsicht kein günstiges Prognosticum zu stellen.) Auf der anderen Seite ist negativ der unindogermanische Charakter der Sprache, soweit uns bekannte idg. Sprachgruppen und Sprachperioden in Betracht kommen, durch die grossen Funde der letzten 20 Jahre, der Tontafel von Capua und der Agramer Leinwandrolle, so klar und unzweideutig zu Tag getreten, dass wir jene Aussenforts, die unsere Vorgänger und Mitstreiter in der Hitze des Gefechtes auf das äusserste verteidigten, im Notfall ruhig räumen können: der Kern der Frage wird dadurch nicht berührt."[17]

7. In view of the fact that the chief argument against the use of the comparative method has been that by means of it scholars have arrived at widely different interpretations, it may not be out of place to refer here to the results attained by the exclusive use of the rival, combinative method, when applied to texts other than short epitaphs or votive inscriptions. Here is Pauli's version of the famous Lemnos inscriptions:

> A. "Holaei sepulcrum, magistratus: ? conditus est aetate quinquaginta annorum primique anni xxxx ? condidit et sepelivit; proprietas sepulcri-est."
>
> B. "Holaei Phocaei; conditus est ? Grab-? ? validitatis-erat aetate nobilitatis-erat gente; urbis Phocaeae; aetate annorum quinquaginta primique anni domicilio."[18]

And here is Torp's:

> A. "Holaie, Enkel des Zia und ältester Sohn des Sialchv(e)i, in dem heiligen *evis?* (oder: in dem ——? Heiligtume), der Vamalasia aus Myrina geweiht einen Grabbehälter? (gab)."
>
> B. "Dem Phocäer Holaie, in dem heiligem *evis* einen Grab-Bau?, ihrem toten Vater, machten, dem fern von Phocäa verstorbenen, der Sohn, Sialchvi und der ältere Sohn Aomai."[19]

In the opening pages of the studies cited above both Pauli and Torp present convenient summaries of the results attained by other scholars—all of them wildly dissimilar.

8. Remarkable as these interpretations are, they are moderate in comparison with the processes by which they were achieved.

> Es geht sonach fast mit Gewissheit hervor [Torp assures us], dass in *haralio eptezio* das *-o,* wie auch Pauli erkannt hat, als ein Wort für sich abzulösen ist. Trennen wir in der gleichen Weise *evisϑ-o,* so erhalten wir als endung -ϑ, welche

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[17] Herbig, *Glotta,* IV, 187.

[18] *AIF.,* II Band, 2 Abteil., p. 105. For the text and interpretation see *LS.,* below.

[19] *Vorgriechische Inschrift von Lemnos* (Christiania, 1903), pp. 27, 34.

> Endung mit der des auf *evisϑo* folgenden Wortes *zeronaiϑ* stimmt. Es liegt dann die Annahme sehr nahe, dass die beiden Wörter attributiv zu verbinden seien. . . . . Es fragt sich nun: was ist das aufgehängte -*o*? . . . . Am wahrscheinlichsten haben wir . . . . wohl in dem *o* ein das Object vorausnehmendes Pronomen zu sehen. Das *o* in *evisϑo zeronaiϑ* weist auf *aker* hin. Es heisst so viel wie: 'den in dem *zeronai evis* seienden Behälter.'

Such a method is hardly justified in calling itself "voraussetzungslos."[20]

9. Nor does the word *voraussetzungslos* apply to the methods by which proponents of the Negative School have sought to dispose of certain striking similarities between Etruscan and familiar Indo-European languages. They admit, for example, that Etruscan *puia* means 'wife'; yet this is not sufficient to permit them to recognize this *puia* as related to the Latin diminutive *puella,* 'girl,' 'maiden,' 'mistress,' 'young wife.' I have not observed that any of them have as yet committed themselves on the archaic genitive of this word, namely, *pvele* (.puelle < .puellae) (*EI.,* No. **16**). They recognize[21] that the combinative method proves that Etruscan *neftś* and *promts* are the same words as Latin *neptis*[22] and *pronepos,* but they dispose of the evidence presented by these correspondences by saying that the Etruscan words must have been adopted from Latin. This plea of wholesale adoption from the Latin is carried to such an extreme as to permit them to subscribe to the astounding doctrine that practically the whole system of Etruscan proper names was taken over from Latin and other Italic dialects![23] Skutsch even went so far as to declare that such a word as the frequent conjunction -*ce*/-*c,* 'and' (*E.,* No. 100), was Latin -*que,* 'and,' adopted into Etruscan, or that this remarkable agreement between Etruscan and Latin was purely accidental.[24] Whatever correspondences may be pointed out between Etruscan and Aryan, the Negativist has always at hand two labels, one bearing the legend *Entlehnung* and the other *Zufällige Ähnlichkeit,* and one or both of these he does not hesitate promptly to affix to any evidence that threatens to disprove his dogmas.

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[20] *Op. cit.,* pp. 25 ff., 33.

[21] Skutsch, "Etrusker," *PW.,* 796.51.

[22] To be more exact, they derive Etruscan *neftś* from Latin *nepōs.* If so, it would have to go back to early *.nep'ōts,* the disappearance of whose long stressed *ō* would have to be accounted for. Whether the law of iambic shortening ever affected such a group as -*ōts* in Etruscan is very doubtful. At any rate, in Lemnian Etruscan the word corresponding to Latin *nepōs* is *napoϑś* (.nəpōts, *LS.,* No. 1), usually misread *napoϑ.* The Aryan character of this *napoϑś* is so clear that it is rarely doubted. Torp (*Vorgriechische Inschrift von Lemnos,* p. 15), because of the *a* for *e,* thought it adopted from some Asiatic Aryan tongue.

[23] Skutsch, *PW.,* 803.22 ff.

[24] Skutsch, *PW.,* 805.1 ff.

10. It is recognized by all Etruscologists that Etruscan uses the ending *-ce* in past tenses and the likeness of this to the Greek perfects in *-ke* has frequently been pointed out, or, as Skutsch[25] testily puts it, "Die Verbalformen auf *-ce,* haben sich den Vergleich mit den griechischen auf -κε vielfach gefallen lassen müssen." It is interesting to study the three efforts made by Skutsch to persuade us that we need not count this agreement as worthy of consideration. In the first place, he urges that the origin of the Greek perfects in *-ke* has never been satisfactorily explained, but that it must have been comparatively late, and that if we associate these perfects with the Etruscan past tenses in *-ce* we are at best comparing one unknown quantity with another. If this argument has any force, it must imply that before we venture to compare any element of Etruscan with the corresponding element in an Aryan language, we are under obligation to explain the origin and development of the phenomenon in the Aryan tongue. This unheard-of requirement certainly constitutes an interesting raising of the bars. But the origin of the Greek perfect is by no means so unknown as Skutsch would have us think. Its development out of such forms as ἔ-θηκε (Latin *fecit*), ἧκε, and ἔ-δωκε, is generally recognized. If, now, we find in Etruscan a like extension, we are justified in comparing the two. It certainly is far more likely that they are parallel developments of a common element than that in two wholly unrelated languages exactly the same phonological element should chance to have acquired exactly the same function.

11. Skutsch next points triumphantly to the fact that in Etruscan the ending *-ce* is sometimes appended to past forms that also occur without it, as though this were a feature that would of itself debar the Etruscan ending from comparison with the Greek. It is perfectly true that the past tense of the verb for 'live' occurs both as *lupu* (.lōpu < le-loip-e, with shift to the *u*-perfect)[26] and as *lupuce* (.lōpucē, with shift to the *c*-perfect). But this extension of the *c*-inflection to perfects in which it did not belong is exactly what happened when the Greek *k*-perfect developed by the analogical addition of the *-ke* of ἔθηκε, etc., to perfects in which it did not originally occur. In other words, Etruscan *lupuce* by the side of *lupu,* instead of being an illustration of an un-Aryan feature of Etruscan, shows us a familiar phenomenon in process of development. The recognition of the possibility that shifts and other changes took place at some remote period in the history of a language, but the refusal to recognize this sort of thing as normal when we actually find it in process, is one of the regrettable results of the customary study of language as a matter of paper and print, instead of as living speech.

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[25] Skutsch, *PW.*, 804.60.

[26] Compare the like shift of *nexi* to *nexui,* along with many other Latin perfects.

But Skutsch urges that, if we admit the similarity of Etruscan to Greek in this particular, we should by so much divorce it from Latin. If we were to recognize this argument as having any weight in such a matter as this, we should have to divorce Latin from Oscan-Umbrian, because Latin agrees with Celtic in having *-ī* in the genitive of *o*-stems, while Oscan-Umbrian does not.

When studying Skutsch's arguments I cannot free myself from the idea that he felt so sure of his ground that he was content to present them without taking the trouble to see what they would lead him to if he applied them to linguistic material other than Etruscan. In fact, they look suspiciously as though framed only for an audience already convinced of the correctness of his thesis—like the tracts defending the articles of faith and intended for the perusal of the members of the church.

12. I have said that Skutsch declined to regard the Greek perfects in *-ke* and the Etruscan past tenses in *-ce* as evidence of the Aryan character of Etruscan because the Greek perfects in *-ke* appear to have been not original but a comparatively late development in Greek. This argument works both ways. Skutsch says: "In der Nominalflexion ist völlig unindogermanisch ausser jenen Dingen, die wir vorhin unter 1 und 2 ihres trügerischen Scheins entkleidet haben, vor allem der Genetivus genitivi, der einen der wichtigsten Prüfsteine bildet."[27] The genitive of the genitive certainly constitutes one of the most striking peculiarities of Etruscan speech, and it might well be urged against the probability of Etruscan's being Aryan were it something fundamental in Etruscan, a primeval feature of the language. But Danielsson[28] and Herbig[29] have called attention to the fact that this peculiar feature of Etruscan is a comparatively late development, and thus it can no longer be urged against the Aryan character of Etruscan.

13. Being committed to the dogma that Etruscan is not an Aryan tongue, the Negativists refuse, on principle, to recognize in the language those very things that reveal its true nature. Laboring under self-imposed restrictions, they were able, at best, to get an impression of Etruscan speech that was very obscure and decidedly distorted. The unreal features that they thus ascribe to the language they then proceed to present as evidence of its non-Aryan character. Perhaps the best illustration of this is the extensive use made of the imaginary plural ending, *-ar*.[30] For the isolated *clan*, 'son,' *clenar*, 'sons,' proved that the Etruscans formed the plural of their nouns by adding *-ar* to the singular—no more and no less than English *child/children* proves that we form plurals by adding *-ren* to the singular. Supposing *clensi* to be a dative, whereas it is a genitive (*PC.*, 10), and assuming that *semφs* was a case-form of *semφ*, while it is in reality a normal Aryan adjectival form of the numeral (*E.*, No. 98), Skutsch held up the assumed plural ending *-ar*,[31] the would-be dative singular in *-si*, and the imaginary inflection of numerals as characteristic Etruscan but non-Aryan features.

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[27] Skutsch, *PW.*, 805.33 ff.

[28] Danielsson, *CIE.* 5093, I, 61, and *Le Monde Oriental* (1908), II, 240.

[29] Herbig, *IF.*, XXVI, 369 n.

14. At the same time he was content to regard such striking agreements between Etruscan and Aryan as the feminine nominatives in *-a*, *-ia*, and *-i* as mere coincidences. But, in order to give these Etruscan feminines an un-Aryan look, he points to feminines in *-ai/-ei* (§ 79) and, analyzing them into masculines in *-a* with added feminine *-i*, exclaims, "In what Indo-Germanic language did feminine *-i* ever behave in this way, instead of taking the place of the masculine *-a*?"[32] Such a feminine ending added to a masculine does, however, occur in so ancient an Indo-European language as Sanskrit (compare formations like *indrā-ṇī*, 'Indra's wife,' Thumb, *Handbuch des Sanskrits*, I, 196), and in so modern an Indo-European language as Skutsch's own mother tongue (*Bäuerin, Tänzerin*, et cetera).

15. The most common masculine ending in Etruscan is *-e* (*Marce* = *Marcus, Tite* = *Titus*, etc.). That this *-e* could have arisen out of Indo-European *-os* Skutsch[33] tries to disprove by comparing its fortunes with those of the Etruscan genitive endings written *-es*, *-us*, and *-as*. He confesses that these Etruscan genitive endings are remarkably like the Indo-European genitive endings *-es*, *-os*, *-ās*, but argues that the identity is only apparent, because, if the Indo-European nominative *-os* became the Etruscan nominative *-e*, we should expect the Indo-European genitive *-os* to appear in Etruscan as *-e* too. This certainly is a very adroit argument and could be counted on to annihilate the position of one who contended that the Etruscan genitives in *-es* and *-us* corresponded to the Indo-European genitives in *-es* and *-os/-us*.[34] If this was all that Skutsch aimed to accomplish, we might admire him as a skillful advocate but should respect him the less as a great philologist. For no one knew better than Skutsch that the Etruscan genitive ending written *-es* was not necessarily *-es,* but might well be *-ēs* as in Umbrian.[35] And no one knew better than Skutsch that in Old Latin a final *-s* disappeared (before a following initial consonant) if it was preceded by a short vowel, but not after a long vowel. He, therefore, must have known that the *-s* of nominative *-os* might easily have disappeared in Etruscan and the preceding *-o* have become *-e* or -ə, while the *-s* of genitive *-ēs* remained intact, exactly as it did in genitive *-ās*. He must also have known (a glance at Schulze's material is sufficient to show it) that the Etruscan genitive in *-os/-us* was characteristic of *n*-stems, and he should have realized that the disappearance of the *-n-* in the genitive could be explained only on the supposition that the *-us* that we find in Etruscan was a spelling of *-ōs* < *-ōn-s,* and that the *-s* of *-ōs* had the same status as the *-s* of *-ēs* and *-ās* and consequently did not disappear as the *-s* of *-os* did.

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[30] Skutsch, *PW.*, 31, 31*a*.

[31] It hardly needs to be added that such accidental plurals as *clenar*, in which the *-ar* is really a part of the stem (*PC.*, 10) might readily form the model for other nouns, and the *-ar* thus become a plural ending—all without causing the language in which the phenomenon occurred to be banished from the Aryan family. Exactly this thing happened in Skutsch's own mother tongue when such nouns as *Lamm/Lämmer*, *Kalb/Kälber*, etc. (in which the *-er* has the same origin as the *-er-* of Latin *genus/genera*) became the models for such new plurals as *Kind-er, Männ-er, Weib-er*, etc., and thus made *-er* the most common neuter plural ending in the language.

[32] Skutsch, *PW.*, 803.61 ff.

[33] Skutsch, *PW.*, 804.3 ff.

When we consider, not so much his great learning, but his very unusual clearness of sight and quickness of comprehension, we cannot doubt that Skutsch would have seen all this as soon as if not sooner than anyone else, had not his eagerness to play the rôle of a successful apologist for the tenets of a decadent school of Etruscology carried him away.

16. In discussing the unique dice on which the Etruscan names for the first six numerals are written out (see § 94) Pauli, Skutsch, and Torp refuse to admit the order suggested long ago by Campanari, which betrays a correspondence between the Etruscan and the Indo-European words. Skutsch declared[36] that he knew the Etruscan dice in a large number of museums, both in Italy and in other countries, and that such an arrangement was unheard of and, therefore, could not be assumed even on these unique dice. Now, however, there are in the museum of the University of Pennsylvania two, and in the British Museum no less than four, Etruscan dice that have exactly this arrangement. And, what is more, one set of three dice in the British Museum shows the three arrangements (one with 1-6, 2-5, 3-4; one with 1-2, 3-4, 5-6; and one with our 1-3, 2-4, 5-6),[37] which fact would seem to indicate that all three orders were normal and stood in some relation to one another. Why Skutsch thought it unnecessary to bother with the collection in the British Museum I cannot imagine.

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[34] Archaic Latin *U̯eneros* = *U̯eneris, Diou̯os* = *Iouis, regus* = *regis,* etc.

[35] Skutsch speaks of nominative singulars like *Leinies* as presumably derived by the "etymologizers" from Indo-European *-os* with an extra *-s* later grafted on (that is, *Lenie* < **Lenios,* like *Tite* < **Titos,* and then *Lenie* + *s* > *Lenies*). It is clear that Skutsch did not know that such forms as *Lenies* were really genitives in *-ēs,* and that Danielsson had pointed out the probability of their original genitival function as early as 1906. (See Herbig, *IF.,* XXVI, 370.) That an Indo-European language might have a genitive singular ending in *-es* which was not original *-ĕs* but from earlier *-eis* should not have escaped him.

[36] Skutsch, *IF.,* V, 266; *PW.,* 801.13.

17. When, in 1904, Torp was so fortunate as to discover, at Viterbo, an inscription containing

L·V · celc · ceanuϑ · avils,[38]

he failed to realize that this meant

'55 (fifty five) years,'

that is, that the numerals were written in numbers and also spelled out, as in our commercial notes, checks, etc. He recognized *celc* as the same as *cealχls,* 'fifty,' and *cean-* as *ce,* 'five,' which he thought meant 'thirty' and 'three,' respectively. The ending *-uϑ* of *ceanuϑ* he thought was for *huϑ,* which he believed meant 'six.' This *cean-uϑ* he explained as 'three (times) six,' or 'eighteen.' But the preceding L·V· makes it perfectly clear that *celc ceanuϑ* means 'fifty-five' and that *celc* or *cealχls* is 'fifty' and *ceanuϑ* or *ce/ci* is *quinque* or 'five.' It will be observed that this was a choice bit of material for a Negativist; for it easily worked out by the combinative method. Skutsch, too, at first failed to recognize the value of the inscription, for in his *"Etrusker"* (*PW.,* 800.8) he says the variant forms of the numerals in the Torp-Herbig collection do not help us to determine the values of the numerals. Later,[39] however, he understood the inscription and recognized that, after all, *ce/ci* was 'five,' and *cealχls* was 'fifty.' I regret to say that he did not feel called upon to confess that this corroboration of the value which the "etymologizers" had assigned to *ce/ci* (Latin *quinque*) plays havoc with his contention that the dice could not have the arrangement that they have.

18. There are, naturally, hosts of cases in which the identity or similarity of Etruscan and Latin words has never been pointed out or even observed or suspected. Such words, of course, caused Etruscologists no trouble. That they avoided detection might be and doubtless was in large measure due to the general inability to observe such things. Still, to a considerable degree we must blame Pauli's "scientific" school for this dullness of vision. Pauli's doctrines made Etruscologists voluntarily obtuse to very obvious things. Indeed, we can at times observe how hard they tried not to see Etruscan relations to Indo-European. One of the best illustrations of this is the way in which they strove not to observe that Etruscan *eϑ* was the same as Latin *et*. When used to connect two words of like inflection, for example, *purenai eϑ verai* (*EI.*, No. **16**), *Seronai-ϑ Sivai* (*LS.*), etc., the nature of *eϑ* should have been clear even if the decipherer could not recognize the words it joined. This is particularly true when it joined the last two words of a series like *Θanr, Tinia, Menerva, eϑ Auśva* (F.III 394). In the original of this text the *eϑ* appears not to be separated from *Auśva,* whence arose the supposititious divinity *"Eϑauśva,"* duly catalogued by Skutsch (*PW.*, *767.32*) and others in the formidable list of Etruscan gods and goddesses "that could in no way be associated with Indo-European divinities." The Bronze Liver has

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[37] Stewart Culin, "Chess and Playing-cards," *Report of the United States National Museum, 1896,* House Document No. 73, p. 834, n. 2. *Report of the United States National Museum, 1893,* p. 494. Brinton, "The Ethnologic Affinities of the Ancient Etruscans," in *Proceedings of the American Philosophical Society of Philadelphia, 1887,* XXVI, 522.

[38] *T&H.,* p. 515. Discussed below in § 94.

[39] I do not know who it was that first understood the inscription. [Probably Lattes, *Glotta,* II, 111.—F. A.]

|LEON | 𐌄O | CAO|

that is, *Leϑn eϑ Caϑ*, *'Leϑn et Caϑ.'* Deecke long ago[40] suggested that this *E*Θ might be an abbreviation of the would-be *Eϑauśva* above; and Körte, after studying the Liver for twenty-five years, could do no better than echo this poor guess.[41] It is hardly necessary to say that there is no such goddess as *"Eϑauśva."* What we have to deal with is *Auśra,* a form of *Aurora* corresponding to Lithuanian *auszrà,* 'Morgenröte.' Our text reads *Auśva,* which could arise phonetically out of *Auśra* or be only a slip for *Auśra,* due to the influence of the preceding *Menerva.* At any rate, that the early form was *Auśra* is proved by the fact that *-a* (= unaccented *a,* rather than *-u* = ϱ), except in very early or Egyptian texts, clearly points to a preceding *-r* (§ 41.1).

19. When we consider the obvious similarity and close kinship of early Etruscan and early Latin, and the fact that we have more than 8,000 Etruscan inscriptions to study, and that Etruscan has been studied for over a hundred years, we must confess that it is no credit to the philological world that the twentieth century found the riddle still unsolved. [And this failure must be attributed in large measure to the earnestness with which Pauli and his followers recommended a method foredoomed to barrenness, while with equal zeal they warned us from the only path that could lead to success.—F. A.]

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[40] *Etruskische Forschungen* (1880), IV, 45 f.

[41] *Romische Mitteilungen* (1905), XX, 366.

NOTES ON ETRUSCAN GRAMMAR; SCRIPT AND SPEECH

These notes are intended to facilitate the study of the inscriptions given below, and to enable the student to get a clearer and more comprehensive view of the language than he would be likely to obtain from the study of the individual texts alone. They have no other aim and I trust they will not be judged by a higher standard. While most of the illustrations have been drawn from the inscriptions interpreted in this volume, the attempt has not been made to note all such illustrations as may there be found. Moreover, in a few cases it has seemed wise to cite illustrations from texts other than those interpreted.

20. We find Etruscan written in various scripts, more or less remotely of Minoan origin. The Etruscan inscriptions from Cyprus (No. 14) are in Cyprian syllabic writing, those found at Praesos (No. 9) in the Greek script current at the time in Crete, those found in Lemnos (*LS.*) and Italy, as well as the Mummy Manuscript, reflect related forms of "Western Greek" script and have more or less kinship with Phrygian and Lydian writing. As revealed in various ways, notably by the numerals around the edge of the child's rattle found at Caere (F. 2403, Plate 43, No. 2405), together with the syllabic exercise above, the usual Etruscan script goes back to a full Western Greek alphabet, although some of the characters early fell into disuse as letters, remaining only as numerals. From the first, the aspirated stops were not felt to be needed to distinguish aspirated from pure stops but were employed as doublets of the letters for the latter. The letters for the voiced stops (*b, d, g*) had peculiar fortunes. **B**/*8*,[1] as in Lydian, became the sign for the *f* (earlier ƀ) that arose out of *bh* and *dh* (§ 55), and thus ceased to be a sign for a stop-consonant. The Western gamma <, as in Latin and Runic, became confused with **K**/|<, persisting in some parts as a sign for either *g* or *c,* and being displaced in other parts by **K**. **D**, *d,* was early confused with **P**, *r,* and fell out of use as a sign for a stop consonant. In a measure, the aspirated stops (Φ, Ψ, ⊖)[2] took the place of the three discarded medials; but the confusion observable in the employment of **C** for both *g* and *c* was reflected in the like use of Ψ for both *g* and *c,* and in the indiscriminate employment of either Φ or 𐌐 for *b* or *p,* and of ⊖ or **T** for either *d* or *t.*

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[1] The early inscription Herbig 117 has **B** = *f,* while in Ga. 804 the earlier **B** and the cursive *8* are used side by side, without differentiation. Lattes once (*Hermes,* XLIII, 34 n.), came very near observing the truth as to the origin of *8*. See also *EEI.*

[2] This Western Ψ corresponds to the Eastern **X**, and, like this, is customarily transcribed χ.

21. That a language possessing the means of distinguishing voiced and voiceless sounds should lose it may seem strange, but it is a well-known phenomenon. For example, exactly this thing happened to the stop-consonants in the Runic writing of the north, and we can witness in living English our failure to avail ourselves systematically of the mates *s* and *z*, for example, in differentiating such pairs as (a) *house* and (to) *house*, (the) *use* and (to) *use*, *loose* and *lose*, *rice* and *rise*, etc. It was unfortunate that a new differentiation was not made, as it was in Runic. Something of the sort also took place in Oscan. Nevertheless, the situation is neither peculiar nor unusual.

22. In the first place, it was very naïve of them to assume offhand that Greek φ, ϑ, χ must have in Etruscan the same values that one learned to associate with these characters on beginning the study of Greek. When it was found that such Etruscan words as *sec*, 'daughter,' and such names as *Lart* were also written *seχ* and *Larϑ*,[3] and that a Greek name like Ἡϱακλῆς/*Heracles* was spelled in Etruscan sometimes *Hercle* and sometimes *Herχle*,[4] it should not have been difficult to divine the truth. Instead, Etruscologists felt warranted in ascribing to the unknown Etruscan tongue a "Neigung zur Aspiration;"[5] and found no absurdity in ascribing to it at the same time the exactly opposite characteristic, a "Neigung zur Psilosis."[6]

23. There is an Etruscan curse (F. 2341–2342) that could have made the matter clear. It is one of the few very oldest of the inscriptions that have come down to us, and of exceptional value. As it is preserved only in a copy made some two hundred years ago, Etruscologists have, so far as I can learn, ignored it. Still, it is evident that the copier took great pains to produce an accurate copy, and it would appear that his errors do not go beyond the natural misinterpretation of some letters that he did not understand; for example, he sometimes copied A as **R**. From this inscription it is clear that in Etruscan (as in English[7] and the German of the north) a stressed voiceless stop was aspirated. Thus, *scipmu-eϑ khiliun* (.scimō et .chiliō), Latin *eximo et cilium*, 'I also except the eyelid,' F. 2342.1; *Persepφuri tua phenus*[8] = *Persephone tua penus*, 'Death (be) your food,'

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[3] Skutsch, *PW.*, 779.29.

[4] Skutsch, *PW.*, 787.60.

[5] Skutsch, *PW.*, 780.16, 787.57.

[6] Such a spelling as *φersipnei* for Πεϱσεφόνη should have shown that φ and *p* were used interchangeably.

[7] Thus we pronounce *papa* either ˋphapə or .pəpà, though most of us are unaware that the p's are not exactly alike. The reader will not misunderstand the spelling *ph* to represent the *f*- sound spelled *ph* in *phase*, etc.

[8] In the phonetic transcriptions of Etruscan words in other inscriptions I shall, of course, make no attempt to reproduce these aspirations, just as we ignore them in English and German.

F. 2342.5. Of course, the old Indo-European aspirated consonants had become fricatives in Italic ages before this inscription was written, and such Greek letters as ϑ and φ, as in other Etruscan texts, functioned only as variants of *t* and *p*.

24. Furthermore, Etruscologists felt free to set up still another imaginary phonological law, namely, that Etruscan had no voiced stops, and then used this assumed law as a test of the validity of the reports of ancient observers of Etruscan speech! Among the Etruscan words recorded by Hesychius there are some that were so unfortunate as to contain voiced stops, and some that were so obviously Indo-European that Skutsch could not but recognize it. Such unwelcome evidence he disposed of in the following remarkable fashion: "Verdächtig sind, schon wegen der Lautierung, da das Etruskische keine Medien kennt, die Hesychglossen ἀγαλήτορα παῖδα, ἄνδας βορέας, βύρρος κάνϑαρος, δάμνος ἵππος δροῦνα ἡ ἀρχή. Δέα ϑεὰ ὑπὸ Τυρρηνῶν und κάπρα αἴξ Τυρρηνοί enthalten wohl die bekannten indogermanisch-italischen Worte."[9] Perhaps the clearest evidence that Etruscan had voiced as well as voiceless stop-consonants is found in the fact that it agrees with Oscan and Umbrian (1) in assimilating a voiced stop to a preceding nasal (§ 34), and (2) in assimilating a nasal to a following voiceless stop (*idem*).

25. Similar was the unhappy plight of Etruscan *o*. At an early date, the Etruscans ceased to distinguish *u* and *o* and often confused *i* and *e* (§ 42, end). One of the very oldest Etruscan inscriptions, that from Novilara (No. **11** = F. 2341.2), uses *o, u,* and *v* for the vowels *o* and *u,* but with considerable confusion. On the Lemnos Stone (*LS.*) the letter *u* does not appear and *o* is used to represent both *o* and *u*. But in most Etruscan texts we find the letter *o* abandoned, and *u* used to represent both *u* and *o*. For *v* = *u,* see § 51.

That Etruscan had an *o* hidden under the ambiguous spelling *u* is clearly seen in the *o* employed in Latinizations of Etruscan names.[10] For example, *Thormena* for Etruscan *Θurmna*[11] (.tormnā), *Poponius* for Etruscan *Pupu*[12] (.po`pō), etc. If there were a real Latin form showing an *o,*[13] we might regard the *o* of such Latinizations as only a reflex of the

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[9] Skutsch, *PW.*, 775.44 ff.

[10] That is, as the Oscans and Umbrians, when employing Latin script, availed themselves of its ability to distinguish sounds not differentiated in the native scripts, so did the Etruscans; and it is absurd for us to welcome the evidence thus furnished in the case of Oscan and Umbrian but to spurn it in the case of Etruscan.

[11] Schulze, *LE.*, p. 98.

[12] Schulze, *LE.*, p. 213.

[13] As in the case of Latin *Octobris* by the side of *Xofer,* the Latin spelling of the Etruscan word (Skutsch, *PW.*, 777.30).

Latin phonology; but there is no real Latin form of these words. In fact, the Etruscan *o* (spelled *u* in Etruscan script) may be rendered *o* in a Latinized Etruscan name even when the true Latin form has *u*. The Latinization of Etruscan *Fulni* is *Folnius* (No. 1), while the true Latin form is *Fulvius*. That is, *Folnius* is only a partial Latinization and corresponds to Latin *Fulvius* exactly as *Pontius* (the Latinization of Oscan Πόμπτιες/*Púntiis*) does to Latin *Quintius*. There thus can be no doubt whatever that in Etruscan *Fulni* the *u* had the sound *o*. In other words, Etruscan *o* had not risen to *u* as Latin *o* had before *l* + consonant.[14] This accords with the fact that Etruscan *o* in final syllables like *os* and *om* did not rise to *u* as Latin *o* did. In other words, while in seeking to determine whether an Etruscan *u* spells *u* or *o*, we shall, of course, get much light from the study of Latin forms, it is nevertheless clear that it will not do to follow the Latin blindly.

26. In attempting to interpret ancient texts, whether Etruscan or not, one should try to realize and bear in mind the fact that they were produced under conditions quite different from those under which we write today. The moderns, as a rule, write according to a convention that admits of few variations. In ancient times, too, there was orthographic convention, but to a far less extent. And there was much less agreement in twelve-citied Etruria than in Rome. In very large measure, each Etruscan scribe strove to analyze phonetically each word he wrote. But in this process he cannot be supposed to have been more skillful, exact, and consistent than would the average modern who tried to do the same by his mother tongue. It will not do to assume that such texts perfectly represent the ancient speech. On the contrary, they must first be interpreted in the light of other texts and of general phonetics.

Phonetic Transcription

27. In attempting to respell words phonetically, I have, in general, used the letters with their Latin values. Thus, *a, e, i, o, u, ü,* like German *a, e, i, o, u, ü; æ* as in Late Latin and Old English (when long, the *a* in English *care;* when short, the *a* in *cat*) ; *ę̄* between *ē* and *ǣ,* the *e* in *met* prolonged; *ǫ,* an open *o*-sound, the *o* in *fortune; ǭ,* the *a* in *all; ä,* the *u* in *cut; ö,* rounded *e,* German *ö; t* as in *tot; s* as in *sot;* and *c* and *g* as in *cot* and *got.* The consonants corresponding to the high vowels *u* and *i* I represent, when they are voiced, by *w* and *y* (as in *wet* and *yet*) ;[15] when voiceless (as in *what* and German *ich*), by *h̤* and *ç*. The labiovelar stops (as in *quid* and *languid;* see § 58) I write *q̆* and *ğ,* the labial element being inherent, not added. The bilabial fricatives I represent by the Greek letters φ and β (compare South-German *quer* = .cβę̄r or .cφę̄r, and *wer* = .βę̄r). When used in phonetic spellings, the Greek letters ϑ, δ, χ, γ have their Modern-Greek fricative values: ϑ as in English *thick,* δ as in English *this,* χ as in German *ach,* γ as in local North-German *Tage.* The Polish *š* and *ž* are employed to represent the fricatives heard in English *sure* and *azure; h̤* represents the *wh* of English *when.* The form *ś* is conventionally used to transcribe the letter 𐌑, which in southern Etruscan usage represents a fricative resulting from the blending of *s* with an adjacent consonant. It probably was a long or double *s,* but possibly at times an *š.* The obscure vowels, spelled α in Greek and often *a* in Etruscan, I represent by the characters ə and ạ.[16]

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[14] Sommer, p. 98. See also *pute* (No. 21*d*), *meϑlumeri* (No. 21*c*).

[15] At times, especially when giving reconstructed Indo-European forms, I have thought it best to employ, in place of *w* and *y,* the conventional characters *u̯* and *i̯,* which in strictness represent the cognate unsyllabic vowels rather than the still closer consonants *w* and *y.* In most cases where I have done this we must frankly

28. Words under discussion are printed in the conventional spelling but in italic type. As a rule, phonetic spellings are in roman type, but preceded by a period to mark them as phonetic spellings. But I have not hesitated to use italics (unless there was some chance of being misunderstood) also for single sounds or parts of words, even though these were spelled phonetically. This I have done because of the awkwardness of such forms as .-os, .o, .in-, etc., and because they are not as readily recognized as are *-os, o, in-,* etc., while this use of italics could rarely lead to misunderstanding. The meanings of words are in roman type but enclosed in single quotation marks to indicate that they are meanings.

In phonetic transcription I follow the practice of modern phonetists in placing the sign of stress *before* the stressed syllable; but I use the grave (`), so that it may point toward the stressed syllable[17] and not toward

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confess that we are unable to say whether the sounds really were *u̯/i̯* or *w/y.* *u̯* (or *o̯*) is usual in English *how* (.hau̯ or .hao̯) and German *hauen* (.hau̯ən or .hao̯ən). Also in weak *we* (.u̯i), but not in emphatic *we* (.wī). *i̯* is usual in South-German *ja* (.*i̯a*). English has either *i̯* or *y* in *yesterday, yoke, you, unit,* etc., but usually *i̯* in *yes* (i̯es) and *y* in *ye* (.yi). *Mute, lute, duty,* etc., have *i̯,* which may disappear after post-consonantal *l,* as in *blue* (.bl(i̯)ū). *i̯* and *u̯* often have the function of a hiatus-bridge in such words as *Indiana* (.indi`i̯æna) and *poetic* (.po`u̯etic); but they may be displaced by the glottal stop ('), especially in intentionally distinct articulation. In this book I have contented myself with printing the diphthongs *ai, au,* etc., without the subscript curl, there being practically no danger that these spellings would be taken to represent adjacent heterosyllabic vowels rather than diphthongs.

[16] [This distinction was ignored by the Editor, who likewise substituted the symbol *h̤* for ƕ to represent the initial sound of English 'when.'—F. A.]

[17] Thus, English *minute,* 'very small,' is pronounced .mai`ni̯ut, less often .mə`ni̯ut, while *minute,* 'sixty seconds,' and *minute,* 'memorandum,' are pronounced `minət.

the preceding syllable. When accenting Greek words printed in the usual Greek type, I retain the familiar signs of accent, regardless of whether it be pitch-accent or stress-accent. But Doric[18] forms and all prehistoric Greek forms are printed without any accent-marks, unless there is some special reason for doing otherwise.

29. A few words should be added as to the way in which the texts are presented in this study. Most Venetic and Etruscan writing runs from right to left ("retrograde" or zigzags back and forth ("boustrophedon"). But, as the direction is generally quite immaterial for our purposes, I have printed all texts, words, and letters facing the right, as ours do. As the Venetic script needs elucidation, I have printed the Venetic texts both in the original characters and in transcription. But in the Etruscan texts I have generally given only the conventional Italic transcription, with Ϝ, ⊙, ϕ, and the Western Greek Ψ, as *v*, ϑ, φ, and χ. Both in the case of Venetic and in that of Etruscan I have given sample facsimiles.

VOWELS AND CONSONANTS

30. The ancient classification of speech-sounds into vowels and consonants was based upon the observation of the superior sonority of pure voice. But from early times there has mingled with this matter of relative sonority the distinction of syllabic and non-syllabic, betrayed by the unscientific term "semivowel." This confusion of ideas was augmented by the study of Sanskrit and familiarity with the "*r*-vowel" and the "*l*-vowel" of the Indian grammarians. For rational thinking it is important that this confusion be brought to an end.

Had the teachers of Sanskrit taken less pleasure in surprising innocent pupils with the paradoxical teaching that the consonants *r* and *l* could be vowels in Sanskrit, they might have discovered that this apparently mysterious oriental phenomenon was no other than that observable in everyday English words like *tabl*(*e*) and *cup* (*a*)*n*(*d*) *saucer*, in which *l* and *n* are syllabic but not vowels. And had they rather directed their minds to a consideration of what really constitutes a vowel, all that seemed paradoxical about the phenomenon would have disappeared long ago.[19]

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[18] For Doric accent, see Thumb, *Handbuch der griechischen Dialecte*, pp. 78 ff. The important thing to remember is that Doric accent generally stands one mora farther on in the word than Attic accent.

[19] On a par with "*r*-vowel" and "*l*-vowel" is the more recent talk of "voiceless vowels," which is about as reasonable a use of language as "wetless water" would be. There are voiced and voiceless resonants. Voiced resonants are very frequent and were observed and named "vowels" long before voiceless resonants were observed. But that is no reason for calling the latter "voiceless vowels." Surely the English language has not lost its vitality nor modern scholars the power of logical analysis.

31. Voice is the most sonorous sound produced by the organs of speech. The distinction between consonants and vowels is based on the presence or absence of some sound other than voice; for the production of a sound other than voice, whether brought about by constriction or complete stoppage of the vocal passage, tends to reduce the sonority of such voice as may be present. In other words, every vowel, even the closest, is more sonorous than a consonant, even the most sonorous.

32. A vowel may be syllabic (for example, the *u* in Latin *ut*) or non-syllabic (the *u* in Latin *aut*), and there may even be a similar consonant (the *w* in Latin *vātes,* or *uātes*). Consonants usually are non-syllabic (for example, the *f, r,* and *š* in English *fresh* [.freš], the *m* and *n* in *mine* [.main], the *r* in *red* and *berry*); but a sonorant, less often a fricative or a stop, may, in certain situations, be syllabic (for example, the *l* in *riddle* [.ridl̥], the *m* in *rhythm* [.riđm̥], the *n* in *whiten* [.h̤aitn̥], the *r* in *pretty good* [.pr̥təgud], and the *š* in *Sh!* as distinguished from *She's pretty* [šiz pritạ], etc.). The syllabic consonants *l̥, m̥, n̥, r̥* are so much like ə*l,* ə*m,* ə*n,* ə*r* that it is often very difficult if not quite impossible to tell which we have to deal with. And this uncertainty may apply to one's own speech as well as to the speech of others. In fact, one may say .əl in one word and .l̥ in a similar word or in repeating the same word.

Such spellings as:

docφmrala, **9**
aiflna, **14**
mealχls, § 97
clan-l
epl, **19.8**
ϑrce
eϑrse, **21b**
tesns, **19.4**
cilϑl
lautn, **19.2**
ϑrfna, **17**
haϑrϑi, **21d**
ϑanr
sacnicn
vaχr

lead us to believe that we have to do with syllabic consonants, and it is doubtless best to go on this supposition; still, it is possible that we really have ə*m,* ə*l,* etc. So, too, when we find the conjunction *-em* spelled *-m* or *-um* (§ 100), and the adapted word *vinum* spelled both *vinum* and *vinm,* we cannot with assurance infer that the different spellings imply different pronunciations; for *-m* by the side of *-um* or *-em* may in reality represent as little difference as is usually made between the final syllables of the English words *rhythm* and *seldom.*

33. Metathesis, haplology, and the 'telephenomena' are more common and carried to greater lengths in Etruscan than in most other languages. The study of Etruscan therefore offers an excellent opportunity for their study.[20]

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[20] [The remainder of this section, dealing with the causes of such phenomena, was too incomplete to be reproduced, and contributed nothing to the matter in hand.—F. A.]

It is usually feasible to arrange phenomena of this type in the classes given below, and it is, for various practical reasons, advisable to do something of the kind. But it is not always possible. Thus such a change as *dōnārōm* to *dōmārōm* (No. **16**) may be viewed as the teleterosis of the dental syllables *dō-nā-rō* to *dō-mā-rō,* with the medial syllable labial. But it may just as well be viewed as a telemimesis of *on-om* to *om-om.* Much the same may be said of the change of Latin *peregrinus* into English *pilgrim.* From such cases it again becomes clear that we have to do with a phenomenon that defies our mechanical method of analysis and labeling. At times we may say that we have two or more processes, simultaneous or successive, telemimesis of some of the sounds and teleterosis of others, and perhaps metathesis or telemetathesis of some of these and of others. But in such complicated cases it is usually more sensible not to make these attempts at analysis but to content ourselves with giving the original data and the final status, unless historically attested intermediate forms are at hand. Some such complicated Etruscan cases may be cited here: *n-mn-m* > *n-mm-n, epanamina,* **16**, by the side of *mn-m* > *m-m-m,* μνᾶμα > *mamima,* **16**; .istaipsa > .itspā (*itsφa*), **9**. *.pūrenai* < purəmai is another case that might with equal correctness be explained as teleterosis (*p-m* > *p-n*) or as telemimesis (*r-m* > *r-n*).

Metathesis: .m̥cā > .māc, *maχ,* § 98; procoān > proconā, **21***f*; mēləcls > mēəcls, § 98; apren > apern > *naper,* **19**.5; Greek erdze > edr̥se, **21***b*; *firni > *firin,* **21***a.*

Telemetathesis. Consonants: cālōnis > cānōlis, **12**; dapm̥lārā > dapm̥rālā, **9**; cnud- > dnuc-, **20**; apern > naper, **19**.5. Vowels: ḥ̤ēlucī > ḥ̤ēlicū, **16**; supererī > sepurerī, **21***c*; moltemerī > metlomerī, with *lt* > *tl,* **21***c*; saliēs > sialēs, **15**.

Teleterosis (dissimilation of similar, non-adjacent sounds): genmen > gelmen / glemen > *clan / clen-,* **19**.10; Cereri > Cereni, **21***a;* ēbibēm > ēbim, **9**; *sacnicn* > *sacnitn,* **21***e*; aiwins > awins > *avis, LS. 7*; mōnā > mōlā > *mulu* (nasals), **12**; cēnāl > cēmāl (dentals), **19**.7.

Assimilation of Consonants

34. As in Oscan and Umbrian, a voiced stop[21] assimilates to a preceding cognate nasal:

nd > *nn,* secundām > secunnā (*śсuna*), **19**.10.
ŋ*g* > ŋŋ, *en-peinge > inpeiŋŋ, **15**.

But a preceding *d* dominates in .ariadnā > *Ariaϑā.*

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[21] On the other hand, the voiceless stop, as in Oscan and Umbrian, dominates a preceding nasal: *Pumpus* (*CIE.* 3797), *Pupuś* (*CIE.* 3792).

Other illustrations of assimilation are:

rd > *rr,* tardavi > tarravi, **14.**
ny > *nn,* moinya > monna, **12**; enya > enna, **21***a.*[22]
lm > *ll,* *h̤elmo > Fulu, **1.**
mn > *nn,* damna > danna, **19**.1; em naper > (h)en naper, **19**.5.
tm > *tn,* in the Greek words ῥυθμός > rutn, **11**.2; τομή > tnē (Appendix).
cn > *tn,* sācnicn̥ > sācnitn̥, **21***e.*
tcl > *t*(*t*)*l,* est-qe > est-clə > estlə, **19**.3.
ttr > *tt,* hatte (*haϑe*), but *haϑrϑi,* **21***d.*
cs > *ts* > *ś,* *śupelneξ,* **17.**

HAPLOLOGY[23]

35. The omission of one of two identical or similar syllables is not uncommon: .perˋrārās > .perˋrās, **19**.6; .deˋdēd > .dēd, **11**.3; .ēwiscestos > .ēwisto(s), *LS.* 8. Haplology is usually syllabic dissimilation, less often syllabic teleterosis (§ 33); at times the conditions are complicated and exact analysis is difficult, if not impossible.

ACCENT

36. The Etruscan word-accent,[24] like the Latin, was an inherited dynamic accent, in short, *stress,* as is proved by the weakening and frequent loss of unaccented vowels (§ 32). Also as regards position in the word, it was, like the Latin, a modification of the Italo-Celtic initial stress, from which it deviated far less than did Latin accent. Indeed, the chief stress in Etruscan still remains on the first syllable of a word in a large majority of cases,[25] namely—(1) if this syllable contains a long vowel or diphthong:

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[22] [Medial *-y-* is often retained in archaic texts and before a following short vowel, according to an unfinished note in "The Tuscan Tung."—F. A.]

[23] Brugmann, I, 857.

[24] For the accent-mark, see § 28.

[25] The first 100 words examined gave the following results:

⏑́ ⏑	22	⏑́ ⏑ ⏑	3	⏑ –́ ⏑	2	⏑ –́	24
–́ ⏑	9	–́ ⏑ –	2	⏑ –́ –	3	⏑ ⏑ –́	12
–́ –	17	–́ ⏑ ⏑	2		—		—
	—	–́ – ⏑	1		5		36
	48	–́ – –	2				
		–́ ⏑ ⏑ –	1				
			—				
			11				
		Initial 59		Medials 5		Final 36	

Later results varied from these but slightly. As will be observed, the attraction from the initial syllable is almost always one to a long vowel or diphthong in the inflectional ending.

(–́ ⏑) ˋ*lāre* (ˋ·lāre), *aunem* (ˋ·aunẽ), *sotris* (ˋ·sōtris), *eus* (ˋ·ēos) ; (–́ —) *cemul* (ˋ·cẽmǭl), *sleleϑ* (ˋ·slēlēd), *caru* (ˋ·cārǭ), *teis* (ˋ·dēīs), *eurat* (ˋ·eurād) ; (–́ ⏑ —) *cerinu* (ˋ·cērinǭ) ; (–́ ⏑ ⏑) *repine* (ˋ·rẹ̄ppine) ; (–́ — ⏑) *ϑurial* (ˋ·dūrīal) ; (–́ — —) *Aulesi* (ˋ·aulēsī) ; (–́ ⏑ ⏑ —) *śācnicleri* (ˋ·sācniclerī) ; (2) if there is no long vowel or diphthong in the word: (⏑́ ⏑) *ame* (ˋ·ame), *tisu* (ˋ·tisu), *vaχr* (ˋ·wacr̥), *polem* (ˋ·polẽ), *telet* (ˋ·deled), *erut* (ˋ·erod) ; (⏑́ ⏑ ⏑) *haϑrϑi* (ˋ·hattrdi), *eϑrse* (ˋ·edrse), *partenus* (ˋ·partenos), *mealχls* (ˋ·mealcl̥s).

But if the first syllable has a short vowel and a subsequent syllable has a long vowel or diphthong, the chief stress shifts[26] to the nearest syllable of this kind: (⏑ –́) *tanna* (.danˋnā), *teza* (teˋstā), *treten* (.treˋtēn), *santi* (.sanˋtī), *Velus* (.welōs) ; (⏑ –́ ⏑) *isairon* (.isairõ), *asial* (.aśīal), *tulϑansur* (.tolˋtānsor) ; (⏑ –́ ⏑ ⏑) *kaϑunea* (.caˋtōnea) ; (⏑ –́ —) *tnucasi* (.tnucāsī) ; (⏑ ⏑ –́) *Morinail* (.murinˋnail), *Velϑinaś* (.weltinˋnās), *fuśleri* (.fuslərī), *tularu* (.tulərō) ; (⏑ ⏑ ⏑ –́) *meϑlumeri* (.metlumeˋrī).

A similar shift is observable in German and Dutch, especially in compounds.[27] Compare *Karˋfreitag* by the side of ˋ*Kar-woche.* In Etruscan the attracting syllable must have a long vowel or a diphthong; hence there are no shifts corresponding to German *leˋbendig* and *Waˋcholder* by the side of ˋ*notˋwendig* and ˋ*Māssˋholder.*[28]

37. As lack of stress causes certain vowel-changes, the spelling of the vowel in question may betray the location of the stress.

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[26] This is a popular form of expression. The stress did not really shift. A secondary stress developed on the long vowel or diphthong, and, in the course of time, this became stronger than the initial stress. Such phenomena are very common in English. Thus, while *ordinary* is usually ˋ·ǭdn̥ri in England, it is ˋˋ·ǭ(r)diˋneri in America, where ˋˋ·ǭ(r)diˋnerili often becomes .ǫ(r)diˋnerili. The ending *-ize* now usually has chief stress in Scotland: *adverˋtize, Germaˋnize,* etc. On the other hand, *superˋvise* has generally become ˋˋ*superˋvise* in England, and *specˋtator* is usually accented ˋˋ*specˋtator* in America. [Dr. Hempl proposed to use a heavy accent mark for the principal stress and a lighter accent mark for the secondary stress, but this distinction is not practical. I have used double accent marks for the principal stress. It should be noted that such double accent marks are sometimes used to represent the secondary stress, but this symbolism seems to me misleading.—F. A.]

[27] Hempl, *German Orthography and Phonology,* Part I, §§ 309 ff.

[28] [The principle may be more briefly stated: 'In Etruscan, the accent falls upon the first long vowel. Words which contain no long vowel are accented on the first syllable.' (It is understood that a diphthong is to be counted as equivalent to a long vowel.) There are a few words in which the influence of analogy seems to have caused a shift of stress, so that they form exceptions to this general principle. A somewhat similar rule holds for Arabic, although in Arabic it is the long *syllable* which attracts the accent, and final syllables cannot have the accent.—F. A.]

An original *ā,* if spelled *a,* is usually stressed; but if spelled *u* it has evidently become *ǭ,* a characteristic of an unstressed syllable (§ 41). *a*: *tanna* (.danˋnā), **19**.1; *teza* (.teˋstā), **19**.4; *ipa* (.iˋpā), **19**.5; *ama* (.aˋmā), **19**.5; *scuna* (.scunˋnā), **19**.10; *eca* (.eˋcā), **23**. But *u*: *mulu* (ˋ·mōlǭ), **12**; *caru* (ˋ·cārǭ), **19**.3; *cerinu* (ˋ·cērinǭ), **24**; *sacniu* (ˋ·sācniō), **23**; *lescul* (ˋ·lēscǭl), **19**.7; *iχutevr* (ˋ·īcǭteur) under *śuci,* **21***a.*

38. When the vowel of an unstressed syllable is obscured, it too may be spelled with a vowel-letter other than the original and thus betray the fact that it is not stressed. Compare *śanti* (.sənˋtī), **12**, with Latin *sentī,* and *naφoϑs* (.nəˋpōts), *LS.* 1, with Latin *nepōs.* Final Etruscan *-e* for original *-os* (§§ 62, 83) tells the same story. Similarly the loss of an unstressed vowel.

The fact that a medial *d* begins a stressed syllable is betrayed by its not being changed to *l.* See § 66.

It was observations such as these that enabled me to determine the laws for stress in Etruscan.

THE ETRUSCAN VOWELS

ə

39. Obscure vowels vary in quality, partly according to their origin and partly according to their environment. All these varieties may be roughly represented by the sign ə.[1] It is better, however, to use two signs: (1) ạ to represent an obscure vowel resembling or suggesting the low central vowel *a* or one of the back vowels *o, u,* etc., as in English *again, obey, Emma, beggar, fathom,* etc., and (2) ə to represent a more forward obscure vowel suggesting the front vowels *e* and *i,* as in English *hated, city, village, escape, enough,* etc. A vowel similar to ə is often used as the second (unstressed) member of the diphthong usually analyzed as *ai,* for example, English *mine,* German *mein,* etc. In Etruscan, as in English, various vowel-letters were used to represent an obscure vowel.[2]

An obscure vowel may arise (1) out of some other vowel. Thus, the obscure vowels spelled *a* in *par* (.pər); *śanti* (.sən\`tī), **12**; *tularu* (.tulərō), **19**.8, are all from earlier *e*; the obscure vowel spelled *a* in *unasta* (.unəs\`tā), **16**, is from earlier *i*; as is also the obscure vowel spelled *u* in *Afunas* (.afən\`nās), **19**.3. (2) It may also be epenthetic. In the latter case it may really be a more or less obscure vowel (for example, *mamina* [.mə\`mīna], **16**), but more often it is no vowel at all but simply represents a glide from one consonant to another in speech that is articulated with undue distinctness for the purpose of mental analysis in the process of writing. Such quasi obscure vowels may well be represented by ə or ạ enclosed in parentheses: *Liśipiϑi* (.lis(ə)bidī), Latin *Lesbidi,* **16**; *niceϑu* (.nic(ạ)\`tō), Latin *necto,* **16**; *mlaχuta* (.mlac(ạ)\`tā), **15**; also spelled *mlaχta.*

Original final -ə disappeared: *clenar,* **19**.9.

a

40. The Etruscan letter *a* may represent —

(1) *ā*: *aker, LS.* 11; *sχaϑ, canulis,* **12**; *uśa laśa,* **18**; *eurat,* **19**.1; *ipa,* **19**.5; *Velϑina,* **19**.6; *Iuras, araś,* **19**.6, etc. Occasionally doubled: *caares,* **11**.1; *limunaatin,* Herbig, No. 117. See § 41, *infra.*

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[1] This character is really a clipped a; it was, however, suggested by ə, an inverted *e,* which is often used for an obscure vowel.

[2] [I have not maintained this distinction in preparing this MS. For both vowels the symbol ə appears.—F. A.]

(2) *ǭ*: see § 41. In very early inscriptions we cannot be sure whether we still have *ā* or an *ǭ* spelled *a* (§ 41).

(3) *a*: the first *a* in *vanal, LS.* 14; *ame vaχr,* **19.2**; *naper,* **19.5**.

(4) ə (§ 39): *ceanuϑ*, § 98, particularly before *r*: *tularu,* **19.8**; the second *a* in *Tavarsio, LS.* 13; *par* (weak form of *per*), **13**; *eśtla* (weak form of *est-χue*), **19.3**; the first *a* in *Vinacna* (.Winnəcˋnā), **13**.

Where the Latin has *ā,* the corresponding Etruscan form sometimes betrays the grade ə, for example, *enesci* (.eˋnēs(c)cī < .enēscəti), **19.7**; Latin *inēscātī;* compare Latin *status* but *praestatus* (Sommer, p. 605). Sometimes both languages had ə: *sulzi* (.sōlstī, ˋ·sōlstətī), Latin *solstiti* < .solstəti, **25**; *aśi* (.aˋśī < .adstətī), Old-Latin *astī.*

As in Latin (Sommer, p. 98), an *a* that was unstressed in the time of Italic stress might become ə, later *i*: *aliqu* (.aliˋgō < .ad-agō), **15**; cf. Latin *adigo, ϑapicu* (ˋ·tābbicǭ < .tābificā), **14**; cf. Latin *tabificus, tabes* and *facio,* etc.

Short *a* of any origin may disappear when unstressed: (*a*)*mi,* **19.3**; *mlaχ*(*u*)*ta* < μαλακτα, **15**, etc. Compare the loss of ə in *enesci,* etc., above.

Long *ā* is not shortened in final syllables, as in Latin. Observe *Ramϑu* (ˋ·rāmtǭ), *cenu* (ˋ·cēnǭ). Etruscan in this respect resembles Oscan and Umbrian. See Buck, § 78.

ǭ

41. The most important of the Etruscan vowel-changes is the tendency of unstressed *ā* to become *ǭ* (like the *a* in *all, talk, war,* etc.) or the still higher ǭ (that is, the open *o* in *fortune* prolonged). We already are familiar[3] with this phenomenon in Oscan and Umbrian, where it is characteristic of final (unaccented) *ā,* but rare in other situations. In all three languages the change in sound is betrayed by the spelling *u* (or *o*) for *ǭ,* or the vacillation between the spellings *a* and *u* (*o*).[4] Such a *u* for original *a* is proof of ǭ, but such an *a* is ambiguous, for we cannot be sure whether it represents *ǭ* or original *ā.*

In Etruscan we find *ǭ*:

(1) Finally: *Ramϑa,* F. 2429, etc., and *Ramϑu,* F.I 387 (both = ˋ·rāmtǭ), Latin *rāmenta,* 'chip,' 'offspring,' used as a proper name; *cerinu*

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[3] I have recently found that Bugge once (*EFS.*, IV, 20) came very near discovering the truth of this matter as concerns Etruscan.

[4] The same phenomenon is observable elsewhere. Old English had the three vowels *a, ǫ, o,* but only the two letters *a* and *o* to represent them. Hence, the intermediate *ǫ* was spelled either *a* or *o*. Cuneiform Assyrian had no sign for *o* (and probably no such sound); hence, when cuneiform writing was used to spell foreign names and words, foreign *o*'s (for example Greek ο and ω) were spelled either with the sign for *u* or with the sign for *a*. See my *OD*.

(ˋ·cērinǭ), **24**; *iśmu* (.īśmǭ), **18**; *ϑapicu* (.tābbicǭ < .tābificā), **14**; *mulu* (.mōlǭ < .moinyā), **12**; the unstressed monosyllable *to* (.tǭ, weak .tā), *LS.* 24;

(2) Before final *l* < *d* (§ 66): *cemul-m lescul* (ˋ·cēmǭlm ˋ·lēscǭl < .cēmād .em .lēscād), **19.7**;

(3) Before one-time final *-m*: *ścuna cenu* (.sconˋnā ˋ·cēnǭ < *.secondām .cēnām)*, **19**.10;

(4) Medially: *iχuteur* (.īcǭteur), **21***a*, under *śuci; ziχuχe* (ˋ·stīgǭcē) by the side of *zinace* (.stiˋnācē), **15**. For the *a* in *iχamus* (.īcāmos), F. 2346, *EEI.* 15, and *ϑumarvm* (.dōmārōm), **16**, see below.

In all such cases an *ā* that is stressed is spelled *a*. Observe particularly the contrast between the two adjacent words *ścuˋnā ˋcenu* above.

There are one or two exceptions to the rule:

(1) A preceding *r* usually (but the Perusian Cippus has *caru,* l. 3, by the side of *eurat,* l. 1, and *araś,* l. 6) preserved the *a* pure: *pura* (.pūrā < .pūrām), **15**; *ϑaura, CIE.* 198; *etera,* 'infant' = (δι)ετήϱα, *EN.* 37, etc. Note especially *ϑaura helu* (ˋ·taurā ˋ·hēllǭ < .taurām .hēllām), *PC.* 20–21.

This law holds good, not only for Italian Etruscan generally, but also for Lemnian Etruscan, as is shown by the spelling *to* (.tǭ), the weak form of *.tā, LS.* 24. But in other Etruscan (including that of the East-Italian Novilara Pedestal, No. **11**) it appears not to exist or not to a sufficient degree to lead to graphic expression. Compare the difference in this matter between Oscan and Umbrian (Buck, § 34).

This phonetic change of *ā* to *ǭ* must not be confused with the wholly different matter of the analogical change of *-ō* to *-ā* (see *ta-na,* **14**).

It must be remembered that the spelling *a* does not necessarily indicate that the sound is *ā* rather than *ǭ*; for *ǭ* may at times be spelled *a,* as in *Ramϑa* by the side of *Ramϑu.* Still, it has seemed best to me to transcribe *a* phonetically *ā* unless there is some evidence that makes it probable that we have .ǭ.

(2) It seems possible that *a* was in some parts really retained after *y,* as after *r*: *ϑevsialϑia,* **15**; *kaϑoniia,* **25**; but *sacniu,* **23**; also *mulu* (ˋ·mōlǭ < .moinyā), **12**.

e

42. The vowel *e* is usually represented by erect or inclined Ǝ, but, as in Latin, sometimes by | | and that side by side with the usual form (F. 296 ter *b*).

The vowel *e* may represent *ē, ę̄,* or *ĕ*—

(1) Original *e*: *felic,* **19.11**; *zele* (.stēllę̄), **26**.

(2) So, too, Ionic η < long ᾱ is spelled *e* in Etruscan, for example, *ϑnē* (.tnē < τομή), rarely *i*. *Persepφuri* (.persepoˋrī), 'Persephone,' § 23,

shows change of η/*e* to *i* by analogy to the many feminine names in -*ī* (§ 102.5).

(3) *ē* < *e*: *Seronai, LS.; ce/ci*, § 98.5.

(4) Original *ei* or *eiy*: *cehen* (˴cēhen), **8**; *eus* (.ēos < .eiyos), **11**.4; *vhēleqū*, **16**; *tetēt*, **13**, etc.

(5) Original *ai*: *sleleϑ* (.slę̄lēd), **19**.3, etc.

(6) Original *e*: *eśt*, **19**.2; *erut*, **11**.1.

(7) Epenthetic *e*: -*em* < -*m*: *polem*, **11**.3; -*er* < *r̥*: *aker, LS*. 12.

There is more or less confusion between *e* and *i*, as in Umbrian, and it is not always possible to determine to what extent this reflects phonological variation and to what extent it is merely orthographic. See § 42.2. There is, however, a real tendency to mutate *e* to *i* before an *i*: *mimniś*, **11**.1; *Lis*(*i*)*piϑi*, Latin *Lesbidi*, **16**. And such an *i* may be extended by analysis, *nic*(*e*)*ϑu*, **16**. Compare *Venileis* by the side of *Veneles*, **13**.

43. In Celtic, Etruscan, Umbrian, and Oscan, an Indo-European *ē* (also *ē* < *ei*, and *ē* < *e*) shows more or less tendency to rise in the direction of the high-front vowel *ī*. In Celtic the change of *ē* to *ī* became complete. In Etruscan and Umbrian the *ē* had become so close that it was often written *i*. There were three similar long vowels to write, namely, *ę̄*, *ē*, and *ī*, but there were only two letters to represent them by. *ę̄* was always spelled *e*, and *ī* was spelled *i*; but the close *ẹ̄* was sometimes represented by *e* and sometimes by *i*. On the Perusian Cippus, .dẹ̄l (Latin *dede*) is written *ϑil* (19.10), but in writing .fẹ̄līc a little farther on, the scribe evidently realized the difference between the two long vowels *ẹ̄* and *ī* and so he wrote *felic* (l. 11).

For such spellings as *ϑil* for .dẹ̄l, observe also *ci* for .cẹ̄, § 98; *Θanχvil* (F. 584) = *Θanaχuel* (F. 2333*b*); *tinia, tinścvils*, **22**, etc. Such an *ī* < *ẹ̄* occurs especially before (*e*)*i*: *Venilei* and *Venileis*, but *Veneles*, **13**. Rarely we find *ei* written for close *ẹ̄*: *sialχveis* for *sialχves, LS*. 6.

44. On the other hand, such a close *ẹ̄*, if stressed, sometimes developed an epenthetic ə before a sonorant like *n* or *l*, whence such spellings as *ceanuϑ*, 'five' (§ 98); *cianil*, 'five times,' 'for five years' (*T&H.*, No. 48) < .cẹ̄nẹ̄li[5] < q̆ẹ̄n-mẹ̄li = *fünf-mal; mēani*, 'once,' 'for one year' (F. 2339) < .sm̥-mēli (whence also Latin *semel*);[6] *aprueunetur* (.appro`(w)ēən(ə)-tor, **26**; *cealχls* < .qẹ̄-dec-wēs.[7]

Old *e* appears as *i* in *cilϑl*, **21***e*; *tiśu*, **11**.4; *firin*, **21***a*.

45. Before a syllabic consonant (§ 32) a stressed *e* is usually mutated to *a*: .*glan* < .glemn̥, **19**.9; *nac* < .nacm̥, Latin *necem* (F. 2598). But the *e* may be restored or become *i* under the influence of other cases: *par niχ*, 'at his death' (Ga. 799), *cilϑl*, above. For *el* > *ol*, see § 49.3.

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[5] The change of *l* to *n* was prevented by the preceding *n* (§ 67).

[6] Sommer, p. 474.

[7] *EEI.*, p. 15.

46. When reduced by lack of stress, *e* may become ə and be spelled *a, u*, etc.: unreduced in *rotn-em*, **11**; but *cis-um*, **21***e*; *eśtla*, **19**.3; *śanti*, **12**; the preposition *par*, but *per peraś*, **19**.6. The preposition *en* is intact in *cehen*, **8**, and in *enēscī*, Latin *inēscātī*, **19**.7, etc.; but we sometimes find *in* in Etruscan too (Herbig 117, *M.MS.* 4.8), and even *im* (F. 2292 and 2297), also *in-pa*, **14** ff.; *in-pein*, **15**.

Unstressed *e* tends to disappear (sometimes together with a neighboring consonant):

Ċerurum, Latin *cereorum*, *CIE.* 4116
sχaϑ, Latin *excitā*, **12**
ϑrfna (.tr̥b`nā), Latin *turbinea*, **17**
sci(p)mu, Latin *eximo*, § 23
ścuna, Latin *secundam*, **19**.10
śpureri, Latin *superī*, **21***c*
eviśϑo < .ēwiscestos, *LS.* 23
Similarly, ϑ for *eϑ*, Latin *et*.

47. Final *-e*, like final *-o(m)*, early became silent: *ϑil* < *dede; hen* < .eme, **19**.5. (But note the adopted *eule*, and *eϑrse*.) Later, the same fate befell the final *e* of enclitics: *eplc(e)*, **19**.10; *śuci-c*, **21***a*.

48. The letter *i* may represent:

(1) Original *ī*: *mi*, **19**.2; *felic*, **19**.11.

(2) Original *i*: *mimnis*, **11**.1; *eviśϑo*, *LS.* 23, *ipa*, **19**.5; *repine*, **21***c*; *sotris*, **11**.4; *canulis*, **12**; *sacni*, **22**; *haϑrϑi*, **21***c*.

(3) Original *i̯*: *firin*, **21***a*.

(4) Original *ē*: cp. § 43.

(5) Original *e*: cp. § 43.

(6) Original *ei, ēi, ai, oi*: §§ 52, 53.

(7) Original *in* + *s*: *iśmu*, **18**.

(8) Ionic η: cp. § 42.

(9) *i* + *ē*: *ebim*, **9**.

(10) *i*-mutation of another vowel: *viniciiu*, **13**.

Medial unstressed *i* may disappear: *cilϑ* < .genitom; *sχaϑ* < .scitā, **12**.

Final *-i* is usually retained: *sacni haϑrϑi*, **21**.

o

49. As a rule, the vowel *o* is not distinguished graphically from the vowel *u*; see § 25. It may represent:

(1) Original *ō* (including Greek ω): *Seronai*, LS. 3; *tularu*, **19**.8; *Pupu*, § 25; *Sotris*, **11**.4; *Tiuri*, **21***b*; *mlerusi*, **15**.

(2) Original *o*: *polem,* 11.3; *Holaies, LS.* 1; *φoke, LS.* 40; *uśa,* 18; *zul,* 19.1; *Partenus, isairon,* 11; *eus,* 11.4; *eviśϑo, LS.* 8; *erut,* 11.1.

(3) *o* < *e* before *l*: *pute,* 21*c*; *Fulni,* 1.

(4) *ō* < *on* + *s*: *ϑauruś,* F. 1900.

(5) Original *oi, ou,* or *eu*: *ōnā,* 9, and see § 53.

(6) Earlier *ao*: *sul,* 25.

50. Final -*ō* early suffered iambic shortening and then disappeared. The shortening evidently took place before the Etruscan accent-shift (§ 36): *zul* .stol < .stolō, 19.1; *ϑu* < *duo,* § 98.2.

Uni .ūnī < yūn < yuzno = Latin *Juno* under the influence of the feminine nouns in -*ī*.

The lost -*ō* of verbal forms might be restored by analogy to verbs with a long vowel in the stem: *tularu,* 19.8; *luu,* 14.

Unstressed final -*ō* < *om* early became silent (see § 63). Later, unstressed final *o* < *os* became -*e* (cp. *LS.* 40), which was lost in a preceding vowel. There was no tendency for unstressed *o* to become *u,* as in Latin. Unstressed medial *o* was frequently lost: *ϑrce,* earlier *ϑurce,* F. 2613, etc. (the past tense of the verb seen in *ϑuraś,* 19.6); *mlerusi,* 15; *lautn,* 19.2; *sacnicn,* 21*e*.

For *ǭ* < *ā*, see § 41.

For *os* + sonorant, see § 83.

u

51. The vowel *u* is generally not graphically distinguished from the vowel *o*; see § 25. But as the second part of a diphthong a *u* is not infrequently spelled *v*: *uvlin,* 11.2; *Tavarsio, LS.* 13. Occasionally a *v,* like a *u,* may spell either *u* or *o*: *snvti* (F. 1267).

In Etruscan the vowel *u* may represent:

(1) Original *u*: *ϑurial,* 12; *puru,* F. 2343,[8] *purenai,* F. 2404 (16).

(2) Original *u*: *fuśleri,* 19.4; *Zuci,* 19.7; *tularu,* 19.8; *ścuna,* 19.10; *tnucasi,* 20; *spureri,* 21*c*; *tisu,* 11.4.

(3) A *u*-like ə, of various origin = *Afunas,* 19.3; *cis-um,* 21*d*.

Unstressed *u* may become ə: *Vinacna* (.Winnəc`nā), 13. It may disappear before a sonorant: *ϑrfna* (.turbnā, Latin *turbinea*), 17.

[8] *EEI.*

THE DIPHTHONGS

52. In the development of the diphthongs beginning with the low vowel *a,* namely *ai* and *au,* Etruscan sometimes ran the same course as Latin (but more rapidly), sometimes it pursued another course.

For *ai,* we find *ai, ae, ei,* and *e,* which certainly betray divergent developments.

In very early inscriptions *ai* stands for original stressed *ai,* as also for *ai* from ā + ī or ā + ĭ: *isairon* (.iˋsairō̃), **11**.3; *Holaies* (.hoˋlaiēs), *LS.* 1; *Veronai* (·ˋwērōnai), *Seronai, LS.; purenai eϑ verai,* 'to the most pure and true,' F. 2404, Tab. 43 = No. **16**.

If the second part of the diphthong yielded first, *ai* became *ae,* as in Latin, and then, by mutual assimilation, the diphthong *ae* blended in the intermediate long vowel *ǣ* or *ę̄,* as it early did in Umbrian and popular Latin and later in all Latin.[1]

In some parts, Etruscan *ai,* like Umbrian *ai,* early reached the stage *ę̄*: *cerinu* (·ˋ*cērinǭ*), **24**; *sleleϑ* (.slę̄led), **19**.3; *zele* (.stēllę̄), **25** n.; *Raśneś* (.rasˋnę̄s), **19**.5.

Where *i* maintained itself, it frequently mutated the preceding *a* to *e*: observe side by side *Anaini* (*CIE.* 209) and *Aneini* (*CIE.* 210); also Schulze, 385.

The same text may vary in its spelling: observe *-ai, -aee,* and *-e* in *punϑlai, ruχiaee, pvele,* **18**. I have not solved the whole problem satisfactorily yet; it appears, however, that we have to do, not only with differences of time, place, and social class, but also with differences in the origin and make-up of the diphthong, and perhaps differences in the stress and adjoining sounds.

I can specify two cases:

(1) The Indo-European *-ai* of the dative of consonant-stems and of the first person perfect early became *-ei*: *Venilei* (·ˋwēnīlei < .wēnēlai), F. 2753, dative of the slave name *Venel* (.wēnēl), 'Slavey,' CIE. 5006, mate of Latin *Vēnālis,* 'slave'; and this *-ei,* earlier than in Latin, became *-ī*: *Liśipiϑi,* **16**; *fuśleri* (fuslərī), *Cereni* (.cereˋnī), **21***a*; *ta-ra-vi* (.tarˋrāwi, Latin *tardavi*), **14**.

(2) The *-ai* formed by the addition of the feminine ending *-ī* to the masculine *-a* of proper names is regularly written *-ai* or *-ei.*

The diphthong *au* (often spelled *av*) is generally maintained: *ϑauruś* (.taurōs), F. 1900; *Tavarsio* (·ˋtauərsyo), *LS.* 13; *lautn* (·ˋlautn̥), **19**.2; *aunem,* **11**.4; *Auleśi* (·ˋaulẹ̄sī), **19**.9, etc.

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[1] Sommer, p. 71.

Sometimes we find mutual assimilation, with the blending of the elements of the diphthong in the long intermediate vowel ǭ, which is betrayed by such spellings as *Fasti* for *Fausti, Rafi* and *Rufi* for *Raufi, Plati* (F. 1650 *bis*), *Plute,* by the side of *Plaute* (Schulze, pp. 211, 320).

On the other hand, the *a* is dialectically mutated to ǭ by the following *u*: *uvlin* (ˋ·ǫulī), **11**.2; *Ruvfe* for *Raufe.*

53. In the development of the diphthongs beginning with a midvowel (*ei, oi, eu, ou*), Oscan is conservative, Latin radical, and Umbrian intermediate:

Original	Oscan	Umbrian	Latin
ei	ei	ē	ī
oi	oi	ō	ū
eu	ou	ō	ū
ou	ou	ō	ū

That is, Oscan retains the original diphthongs;[2] Umbrian suffered them to become the long midvowels *ē* and *ō*; Latin did the same, but then permitted them to rise to the high vowels *ī* and *ū*. Now, the general retention of the letters *ē* and *ī* in Etruscan script enables us to see that Etruscan, like Umbrian, halted at the stage *ē*,[3] and we are therefore justified in assuming that it did the like in the case of the corresponding back midvowel *ō*. And this assumption is backed by the Cretan spelling *ona,* **9**. Thus, Etruscan ran parallel with Umbrian in not raising *ē* (< *ei*) and *ō* (< *oi, eu, ou*) to *ī* and *ū*. And in this conservative course, Umbrian and Etruscan were accompanied by the Latin of Praeneste. In all probability, the rise of *ē* and *ō* to *ī* and *ū* was an urban extreme, which, as is well known, was in the case of certain words unable to maintain itself against the surrounding rural usage.[4]

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[2] But with *eu* > *ou,* that is, with the *e* mutated to *o* before the *u.*

[3] Still, this close *ē*, like original close *ẹ̄*, is sometimes spelled *ī*; see § 43.

[4] In treating these matters, Sommer (pp. 75, 81) fails to make it clear that *ī* and *ū* represent only an advanced development of *ē* and *ō*, corresponding exactly to that observable in Greek *ei* > *ē* > *ī* and *ou* > *ō* > *u*, but gives the impression that they constitute a divergent development.

In discussing *oi* > *ū* (p. 75) Sommer (like Lindsay, Kretschmer, *KZ.*, XXXI, 352 f., Planta, I, 153; and Thumb, *Englische Studien,* XXXIII, 164), suggests a development that is sadly at variance with conceivable phonetics. It is true that *oi* could develop in more than one way. If the high front *i* asserts itself, the *o* becomes fronted to *ö*, which might rise to *ü* and, having become a front vowel, might lose its rounding (inherited from the older back vowel *o*), and thus become ī, exactly as *ȳ* did in Old English and *ū* has done in many German dialects. But when we see *oi* changed to *oe,* we know that the second part of the diphthong has weakened and is on its way to ə and to absorption in the preceding *o*: that is, *oi* > *oe* > *oə* > *ō*, which

For Etruscan *ei* > *ē*, observe *cehen* (.cēhen), **8**; *Seasi* (.sēāsī), *LS.* 3; *Veil*(*i*)*a,* F. 1176, *CIE.* 4010, etc., later *Vel*(*i*)*a,* F. 2648, etc.;[5] *eus* (.ẹ̄os < .eiyos), **11.4**; so also the genitive ending *-ēs* (§ 76). By the side of *teis* (.dēīs), **20**, we also find *ϑii* and *ϑiu,* **19**.10, which might be associated with Latin *dīus* as distinguished from *dīuus/deus,* but more likely have *ī* for close *ē* (§ 43). Probably so too in the dative singular *Liśipiϑi,* **16**.

For Etruscan *oi* > *ō,* see *mulu* (.mōlǭ), **12**; *un* (.ōn < .oinom), *M.MS.*;[6] *ōnā,* 'at one and the same time' (Latin *ūnā*), **9**.

54. It is generally held that *eu* became *ou* in the Italic period, but this is disproved by the persistence of *eu* in early Etruscan: *eurat* (.eurād), **19**.1; *euras* (.eurās), F. 2301; *Clevsinsl,* F. 2033 *bis; Ea, CIE.* 5092. *eu* < ευ: *eule* < εὗδε, **18**; *ϑevsi* < ϑευσι, **15**.

Later, as in other Italic dialects, the *e* was mutated to *o* by the following *u,* and this secondary *ou* then joined original *ou.* Observe: *Luvciius* (.loucios), F. 2287; *Ruvmia* (.roumiā); compare the later *Runru* (.rōnro), F. 2307 = rōməlo (implied in *Ruml-nas,* F. 2171), Latin *Romulus.* See Excursus III, below.

It should not be overlooked that the spelling *eu* may also stand for .eō, etc.: *teurś* (.teōrs), **25**; *eus* (.ēos), **11**.4, etc.; but the spelling *ev* makes it likely that we have *eu* in *iχutevr* (**21***a*), though this *eu* arose out of *e* + *o.*

I do not remember noting cases involving the diphthong *ou.* For *ow,* see *pvele,* **18**.

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might stay *ō* or rise to *ū.* But when *oi* had once become *oe,* the chance for *i*-mutation of the *o* to *ö* was gone. Latin scholars who suggest that *oe* could become *ö* are doubtless misled by the German spelling *oe* for *ö.* But this spelling (*oe*) arose, not in the diphthong *oi* but in words like *Götter* < *gotir,* in which, before the *i* had become *e* (later ə), it had more or less palatalized the intervening *t,* and it was this *t,* not the following *e,* that now mutated the adjoining *o.* Moreover, even if the Latin *oe* (< *oi*) had in some mysterious way become *ö,* or even *ü,* there is no known process by which it could have become the back vowel *ū.* All tendency is in the exactly opposite direction: compare early Greek υ (= ū) > Javonian υ (= ü); Latin ū > French u (= ü); and the fronting of *u* in Swedish *hus* and English *too* in northern Great Britain and the Scotch-Irish territory of our midland and South.

[5] But we may here have to do, in part, with original *ēi*; see Walde, *fēlo* and *fīlius.*

[6] It is interesting to observe how Skutsch reacted to this *un.* In enumerating the divine names to be found in the Mummy Manuscript, he says: "wiederholt *un, une,* was vielleicht zu *uni,* 'Juno,' gehört," Skutsch, *PW.,* 778.19–20. For *uni,* see § 33.

CONSONANTS

Indo-European *bh, dh, gh, ğh*

55. In Etruscan the Indo-European aspirated voiced stops, or the fricatives usually so analyzed, developed much as in Latin, but not uniformly so.

bh

As in Latin, initial *bh-* usually became an *f-* (at first the bilabial .φ, which probably later became the dentilabial .*f*): *firin,* 21*a*; *az-favanai* (.ats-fawanai), 'may it bring joy'[1] (Herbig, No. 117); *fvimv* (.fuimo), Latin *fuimus,* F. 314, *CIE.* 52*a*; *fuśleri* < *.bhustarai, **19**.4; *fust,* F. 2345, *EEI.* 15.

A following non-adjacent *l*[2] evidently caused more or less modification of this development, as would appear from the orthography. The *l* seems to have induced velarization of the *bh* into .w (spelled *v*) or into .h̤ (spelled *vh*), and to have delayed the devocalization of the fricative. (But it is not possible to be certain about these matters, as *v* might spell .β or .φ as well as .w or .h̤.) Thus, *vhelequ* (.h̤ēlecū), Latin *fīdūcia,* **16**; *Vile,* Latin *fides*[3] (Herbig, No. 563), etc.

Medial *bh* I have not yet identified with certainty except (1) in *haϑrϑi* and *repinϑi,* **21***c,* in which the development appears to have been *bh* > .β > .b > .d by assimilation to preceding dentals, and (2) in *pa-ci-mi-ra* (.pacimra), **14**, in which the development appears to have been *bh* > .β > .b > .m.

dh

56. As in Latin, initial *dh* usually coincided in development with *bh* (§ 55) and thus became .φ or .f (spelled *f*): *fanurus* (.fanəros < .fanlos < .faməlos), Latin *famulus* (compare also *vanal* below); *fanu* (.fāno < .fānom), Latin *fanum, CIE.* 4116; *vas fesϑ* (.wās .fēst < .fēsto < .fēstom), Latin *vas festom,* F. 2301

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[1] This is an optative in *āi* (< *ā* + *oi*), not an unusual formation in Etruscan and Venetic. It is from .ats (< .ad-s), Oscan *az,* and *fawanō,* a verb from .fawanos, 'bringing a blessing, good fortune, or joy'; see Walde, *s.v. faveo.* The text is on a money jar, Herbig, No. 117.

[2] Usually *l* < *d* (§ 66), sometimes an original *l* that for some reason or other had not become *n* (§ 67).

[3] In Latin the old *s*-stem was attracted into the fifth declension (Sommer, § 395), but the original *s*-stem is betrayed in Etruscan by the loss of the final *s* after the original short *e* of **viles.*

Under the same conditions as *bh, dh* became velarized: *vanal* (.wanəl < .wanəlos), Old-Latin *famul, LS.* 14; *Veil(i)a,* F. 1176, *CIE.* 4010, etc., later *Vēl(i)a,* F. 2648, etc. But observe *felic,* Latin *felix,* which is irregular also in not having ***l* > *n***; see **19.11**.

Medial *dh* I have observed only in *Ruifriś* (wife) of *Rubrius,* F. 2613, genitive of **Ruifre* (also *Ruife,* F. 2073, with teleterosis of *r*), by metathesis from *Rufrie,*[4] Palignian *Rufries,* Oscan *Rufriis,* Latin *Rubrius.* This betrays Etruscan sympathy with P-Italic.

gh

57. As in Latin, initial *gh* became .χ, later .h: *huśina* (.ho`sīna), 'the parts of the entrails that related to the enemy,' *M.MS.,* Latin *hostilia,* '(things) pertaining to the enemy'; *hinϑiu* (.hind`yō), 'underground,' **8**.

As in Latin (Sommer, § 114), there evidently was in Etruscan some confusion between gh/*g*h > .h and ğh > .f or .h: *Hastia,* F. 555, etc., and *Fastia,* F. 1274, etc. Similar confusions took place between Middle English and Modern English: M-E. *hole, hooping cough,* etc., with .h, Mod.-E. *whole, whooping cough,* etc., with .h̤, for original .h-. In *who,* etc. (now .hu), the .h was historical.

ğh

Much as in Latin, *ğh* became .h̤ (spelled *vh*), which later was either (1) develarized,[5] that is, became the bilabial .φ, later perhaps the dentilabial .f (both spelled *f*), or (2) was delabialized, that is, became the glottal .h (spelled *h*): *Vhelmus, Felmui,* etc.

Medial *ğh* became, as in Latin, the corresponding voiced .w (written *v*): *az-favanai* (§ 55 n.).

Labiovelar Consonants

58. It is usually difficult or quite impossible to determine whether we have to do with the original labiovelar .q̆ or with the resolved .cw, for it is difficult to tell .q̆ from .cw, even in modern English (where in such a word as *queen* some speakers say .q̆īn and some say .cwīn), and the majority of speakers would analyze both .q̆ and .cw as .cw. Thus, I should not venture to say whether such a spelling as -*χue* represented .q̆e or .cwe.

But certain spellings appear to betray one rather than the other. Thus, *pχvaχa* (.q̆aca < .q̆aq̆a), Latin *quaqua,* 'wherever,' F. 2301, seems to imply that the labial element began just as soon as the velar, that is, they were simultaneous; in other words, we have to do with the labiovelar stop *q̆*.[6] The same is witnessed to by the spelling *avcva*[7] (.aq̆ā), 'with water,' Latin *aqua,* F. 2292. On the other hand, such a spelling as *raquvus* (.rac(u)wos < .arq̆os), 'vessel,' F.I 444 (a feminine mate of Latin *arcus,* Old-Latin genitive *arquī,* but confused with *arca*), would seem to imply .cw rather than .q̆.

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[4] Betrayed by the Latinized form seen in *Rufrius, CIE.* 2974, and by Etruscan *Rufriaś, CIE.* 3596.

[5] Compare English *tough* (.tuf, formerly .tōh̤).

A consonant involving two constrictions or one constriction and one complete stoppage is not readily apprehended by a child learning to speak. A labiovelar is, therefore, likely to be imperfectly reproduced and thus, in the course of time, to undergo a change. Of the modern Indo-European languages, English is practically the only one that retains the labiovelar stops *q̆* and *ğ* and the velolabial fricatives .h̤ and .ω.

(1) A modified labiovelar may retain both its elements intact but produced in succession instead of simultaneously, so that *q̆* becomes *cw*;

(2) A compromise may ensue whereby a labial stop (*p* or *b*) takes the place of the labial fricative and the velar stop;[8]

(3) On the other hand, the labial element may disappear entirely, and thus the guttural stop *c* take the place of the labiovelar stop *q̆*;

(4) Other developments, like the occasional Greek change of *q̆* to τ (τε < *-qe,* 'and'), need not delay us here.

59. The Italic dialects that we group as Oscan-Umbrian show the labial stop *p*. Compare Oscan *pod* = Latin *quod.* All other Italic dialects retain Indo-European *q̆* or change it to *cw.* Compare Latin *-que,* early Etruscan *-χue,* later *-χe* or *-ce,* still later *-c* (§ 100). The latter group of Italic dialects we have hitherto known as Latin-Faliscan. It now turns out to include also Siculian, Venetic, and Etruscan, and its importance is proportionately augmented.

Early Etruscan still had .q̆ or .cw, as is betrayed by various spellings: *qaves* (.cāwēs < .q̆āwēs), Latin *quavis,* and *qui* (.q̆i or .cwi) = Latin *qui,* are found in F. 314, *CIE.* 52*a*,[9] in which *q* spells .c; *χue* (.q̆e or .cwe), Latin *que* (§ 100); *Aχvile* (.aq̆ille or .acwille), Latin *Aquillius; c*(*a*)*-va-li-ya* (.q̆alya or .cwalya), Latin *qualia* (14*c*), etc.

It is evident that at some very early day Etruscan, like Latin, delabialized a labiovelar under certain conditions, for example, before consonants and before *o* (*ścuna*), but not after ŋ (*unχva, Mu.* 12.4).

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[6] It would be a mistake to assume that the spelling *pχv* represented a tendency toward the Oscan-Umbrian development of .q̆ to .p. The preceding *p* and the following *v* together represent the labial element of .q̆, which did not follow the labial stop *c* (spelled χ), but was synchronous with it; in other words, the lips were already rounded when the velar stop was being sounded. Compare *avcva,* below.

[7] Fabretti's *acva* does not agree with his facsimile, Plate XLII.

[8] Compare the similar change of Old-Latin *duis* (.dwis) to Latin *bis,* with the labial stop *b* in place of the earlier labial fricative *w* and the preceding dental stop *d.* In Etruscan, on the contrary, *dw* became *d.*

[9] [See *EI.,* No. **6**.]

Later, but still at an early day, Etruscan went farther than Latin in such delabialization. A typical case is Latin *-que,* 'and,' early Etruscan *-χue,* later *-χe or -ce* (§ 100), still later *-c.*

60. Delabialization appears first in unstressed syllables and was probably hastened by lack of stress. Compare *pχvaχa* (.q̌ācǭ or .cwācō), from earlier .q̌āq̌ā, Latin *quāquā,* 'wherever,' F. 2301. Also *Qvarϑv* (.q̌arto or .cwarto) by the side of X*artillaś* (.carti`lās), § 98. It is possible that this .q̌ or .cw is from the Latin, like that of *Cvinte* (F. 980). The .q̌ of the Etruscan cognate of Latin *quattuor,* 'four,' suffered special change in Etruscan *huϑ* (.hot), 'four,' which I shall explain at another time.

As *w* sometimes became *l* (§ 70), so the labial element of *q̌* or *cw* may at times appear as *l.* I have observed this chiefly in the enclitic .q̌e or .cwe, 'and': *cle,* § 100; *cla* (.clə), F. 2603 *bis; estla* (.estlə < .estclə < est + .cwe). Compare also .ŋgw > .ŋgl in *unχva meϑlum-ϑ,* puts 'gobs of sacrificial paste and much pulse,' *M.MS.* 12.14; but *zeri unacla,* 'offer the gobs of sacrificial paste made with whey,' *PC.,* B 18.[10] In the conjunction .q̌e > *cle,* the *l* lingered longer after .q̌ generally had become .c. Observe *Cestnal* (.cestnal) by the side of *-cle, CIE.* 4116, also *Cestnaś, CIE.* 3565, but X*vestnaś, CIE.* 3566. This last is a comparatively late inscription and its X*v-* is doubtless an archaism preserved in the family;[11] still, it doubtless gives us the earlier form.

After the delabialization of *q̌* (.cw), new secondary .cw arose in various ways:

(1) From Latin *qu:* for example, *Cvinte* or *Cuinte* from Latin *Quintos,* later *Quintus.*

(2) From *c + p:* for example, *tinscvil,* 22; *ϑanaχvel* (.dānacvēl), F. 2333*b,* literally 'kid' (cf. Latin *dama,* and *capellus*), used as a girl's name (compare the similar use of English *kid, puss,* etc.), later *ϑanχvil,* F. 584, genitive *ϑanχvilus,* also, as a feminine, *ϑancvilei,* F.I 398.

(3) From unstressed *tr:* thus, *-χva* or *-χve,* 'across,' 'past,' from postpositive *tra*(*n*)*s, Mu.* 8.3, etc.; *EEI.* 15 n. This change is found only in

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[10] *unχva* (.uŋgwā) > *unaclā* (.un(ə)clā), neuter plural of an *o*-stem mate of Latin *unguen,* 'ointment.' *meϑlum* (.metlom), 'much' < .moltem < .moltm̥mom), 21*c.* ϑ (.t < .et). *puts* (.potts), for earlier .poltes, whence also *pulϑes* (.poltēs), Ga. 912 *bis,* Latin *pultis,* genitive of *puls,* 'pulse,' 'thick pap or pottage, used at sacrifices and as food for the sacred chickens,' 21*c.* *zeri* (.tsērī < .csērī, later *śeri,* Latin *sērī,* genitive of *sērum,* 'whey,' Sanskrit *kšaram,* 'water'; *ϑil* (.dil or .del), 'offer'; see 19.10.

[11] Compare *Greene* by the side of the adjective *green, Rendtorff* by the side of the common noun *Dorf,* etc.

fler-χva, fler-χve, and may be due to teleterosis (.rtr > .rtw and subsequent assimilation .rtw > .rcw). Compare the similar change in *Auśva* < **Ausra,* § 18.

Loss of Final *-m*

61. Etruscan final *-m* disappeared at a much earlier date than did final *-s*. There was doubtless an intermediate stage when the preceding vowel was nasal though the *-m* was no longer sounded. So long as the letter is consistently written, it is not unreasonable to suppose that the consonant *-m* was still heard:

ϑumarvm, **16**
desiem et epim, **9**
aciam, **13**

When *-m* and *-n* are written indifferently (*polem isairon,* **11**.3) or *n* only (*Khilivun*), we may safely assume that we have to do with final nasalized vowels. When no nasal letter is written (*mulu, ścuna*), nasality had probably quite disappeared.

The nasal consonant persisted after a long vowel longer than after a short one: *fanu* (.fānŏ < .fanom) beside *cerurum* (.cērōrōm), *CIE.* 4116; and correspondingly at a later time: *fust* (< .fustom) by the side of *aisaru* (.aisərō < .aisərōm), F. 2345, *EEI.* 15.

Final *-s* > Silent after Short Vowel

62. As in Old Latin, a final *-s* preceded by a short unaccented vowel disappeared, originally only before a following initial consonant.[12] This was later than the loss of final *-m* (§ 61), and both phenomena were much later than the assimilation of final *-s* to a preceding sonorant consonant (§ 83) after the syncope of the intervening short vowel. Very archaic: *partenus* (.partenos), **11**.2, even before an initial consonant; slightly later: *icamus* (.īcāmos) before *ia*(*m*) but *fravvmv* (.frāwəmo < .ferāwəmos) before *pici,* by the side of complete loss of *-om* in *fust* (.fust < .fustom), F. 2345, *EEI.* 15; later, but still very early: *evisϑo, haralio, Tavarsio,* etc., by the side of but one (*φoke,* that is .poce < .poco < .pocos), with *-o* weakened to *-e* (*LS.*); later: *ame,* **19**.3, *Tite, Marce,* and many others. Observe also *-es* > *-e: pute, haϑe,* **21***c,* etc.

The Consonants *s, ś,* and *z*[13]

63. Besides the Ʃ or Ƹ familiar to us in early Greek and Latin, the Italic peoples inherited from the older alphabet the letter M which represented an *s*-sound that arose from the amalgamation of .s and some other sound. This double or harsher *s*-sound is transliterated *ś,* while Ƹ and 𐌔 are rendered *s.* It should be noted, however, that in northern Etruria and northern Venetia the values of the two *s*-letters are reversed. Most South Etruscan texts have:

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[12] In Etruscan the *s*-less forms prevailed, even before a following initial vowel. In Latin, on the contrary, the antevocalic *s* forms prevailed.

[13] [Taken from "The Tuscan Tung" and from stray notes.—F. A.]

𐌔 .s M .ś ‡ .st or .ts

while most North Etruscan texts have:

𐌔 .ś M .s ‡ .st or .ts

I may add that most South Venetic texts have the usage of southern Etruria, and North Venetic texts that of northern Etruria.

But there was at an early date a different usage that extended far both in Asia Minor and in the West, namely:

𐌔 or Ƹ .ś ‡ .s

This we find, for example, in Lycia, Lydia, Phrygia, Lemnos, and northern Italy. The form ‡ was not always maintained, but changed partly to Z and partly to ᛣ. I may add that the values of Ƹ Z varied in Phrygia exactly as those of 𐌔 M varied in Etruria.

Etruscan *ś* occurs:

(1) corresponding to Latin *ss, rr:*
uśa laśa = *ossa lassa* (**18**); *ϑuśaϑur* = *torreatur* (**5**).

(2) .ś < *.ts* (spelled *z*) < .cs:
śa (§ 98) < *zecsa* (**7**); *śuϑis* (**8**).

(3) Frequently next to a voiceless stop:
ścuna (**19**.10), *naφoϑś* (*LS.* 2); *ϑuśce* (**6**); *unaśta* (**16**), etc.

Etruscan *z* represents:

(1) .ts < .cs: compare *zeri* (*Mu.* 5.22) < *csērī = Latin *sērī,* genitive of *sērum; zal* (§ 98); *zuci* (**19**.7); *zecsa* (**7**), etc.

(2) .ts < .ti̯: *Laziu* < .larti̯o (F.I 438); *Mezu* = *Metius* (Fabretti's *Glossarium,* p. 1226).

(3) .st in *zreχuva,* Latin *strebula* (**26**); *przi* < .prstī, Latin *perstiti* (on a silver cup, F. 2754); *zele śulzi* = *stellae solstiti* (**26**); *ziχuce* (**15**).

Notice, however, the tendency to use the letters *st, sϑ, śt, śϑ* instead of *z*: *utuze* (F. 2094), but *uϑuste* (F.I 413), and even (presumably late *utuśe* (Ga. 650). Compare also: *ustvn* (F. 2345, *EEI.*); *stani* (F. 2343, *EEI.*); *unaśta* (**16**); *eviśϑo* (*LS.* 8), etc.

In late texts (notably the Mummy Manuscript), *s, ś,* and *z* are confused (Skutsch, *PW.,* 779; Pauli, *AIS.,* II, 135 ff.).

Final -*d* > Silent
Final -*t* > -*d* > Silent

64. Final -*d* > silent: *hinϑiu* < *hintiōd; see *hinϑia* (**8**). As in other Italic dialects (Sommer, § 489), final -*t* became -*d*. Though this is concealed in Etruscan by the ambiguity of the spelling (*t*/*ϑ* = .t or .d), it is betrayed by the later loss of the *d*. Early: *erut* (.erod), **11**.1; *tetet* (.deˋdēd), **13**; *eurat* (.eurād), **19**.1; *sleleϑ* (.slēlēd), **19**.3; *raneϑ* (.ranˋnēd), F. 2345, *EEI*. 17. Later: *śie* (.siˋē), **16**; *turce* (.dorcē), later *ϑrce* (.ϑr̥cē); *ϑnaϑ* (.tnād), Latin *teneat,* Herbig, 117; *ersce* (.erˋscē < .res(e)cēd, Latin *resecuit*), F. 2598; *tenue* (.tenue), F. 2033. Still later: *tenu* (.tenu), F. 2070, F.III 329; *φelucu* (.perˋlūku < .perducuit), F. 2101; *eiśnev* (.eiśˋnēv), etc., F. 2100. With this -*d* < -*t,* contrast the persistence, as in other Italic, of -*t* < -*ti,* for example, in *śuϑiϑ* (.śu(d)dit), Latin *subdit,* 'overcomes,' F. 2335, F.III 2335.

Final -*nt* > -*ns*

65. This change has long been known in Oscan and Umbrian, though scholars have not been agreed in explaining it (Buck, § 128). In the Etruscan texts in this volume it is found in *tulϑans,* **21***c* (.tolˋtāns < .tolltānt), analogically also in *tulϑansur* (.tolˋtānsor for .tolˋtāntor), **21***d,* etc. Such forms as *ϑriφtent* (.tripˋdēnt), Latin *tripodent,* F. 2346, *EEI*. 15, found in some early texts, would make it appear that the change was not very early, or only local. The primary ending -*nti* appears as -*nt,* for example, *timunt* (.timont) < *timeont(i), Latin *timeunt* (Sommer, § 327). For *tesnś* (.tesn̥s), **19**.4, we should expect *tesans* (.tesˋāns).

Intervocalic *d* > *l*

66. One of the most important and characteristic consonant-changes in Etruscan is the shift of medial *d* to *l*:[14] *Holaies*(*i*), *LS*. 1; *Lala* (= *Leda*); *polem,* **11**; *Vile* = *Fides,* Herbig, Entry No. 563; *aliqu* (.aligo), **15**; *sleleϑ,* **19**.3; *telet,* **11**.4; *ϑil,* **19**.10; *vhelequ,* **16**; *mlerusi,* **15**; *śacnicla,* **21***e*; *avis, avils, LS*., **21***b*; *epl,* **19**.8; *tular* (F. 1044) = Umbrian *tuder,* see **19**.5.

A final -*d* might become -*l* before a following initial vowel and this *l*-form become generalized, whatever the following sound. The most important case of this is -*ad* > -*al* > -*l* (§§ 86, 77): *ϑuri-al,* **12**; *aśi-al, LS*. 15; *Raśnal,* **19**; *Larϑal,* **23**; *Larϑalś,* **19**.11; *Morinai-l, LS*. 17.

Similarly, the unstressed ablative -*ād* might become -*ǫl: cemul -m*

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[14] Similar change of *d* to *l* in Sabine, etc., is well known; see Conway, *IF*., II, 157. The Etruscan phenomenon is parallel to Umbrian *d* > *ř* (Buck, § 131).

lescul, **19**.*7*. But usually the preconsonantal form in *-ād* persisted until the *-d* became silent (§ 63).

Such an *-l* might blend with a preceding *-l* of the stem: *sul,* **25**.

Medial .dec, 'ten,' following the *-ā* of a numeral, regularly became .ləc, later .l̥c, .lc: *mealχls,* etc., § 97.

If a medial *d* began a stressed syllable, it was virtually initial and was not changed to *l*: *Lisipiϑi* (.lis(ə)pi`dī), **16**; *tetet* (.de`dēd), **13**; *ϑriφtent* (.trip`dēnt), Latin *tripodent,* F. 2346, *EEI*. 15. There are also a few other irregularities in the change of *d* to *l*.

Intervocalic *l* > *n*

67. Intervocalic *l* tended to become *n*: *ma-na* (.ma`nā, Latin *mala*), **14**; *repine* (.rēppine, Latin *reptilia*), **21***c*; *zinace* (.sti`nācē, Latin *stilavit*), **15**; *meani* (.mēəni < .sm̥mēli); *unaśta* (.unəstā < .ulistā), **16**; *mu-no-ti* (.munətī < .mulətī), **14**; *cerinu* (.cę̄rinǭ, Latin *caerula*), **24**; *sacnicn* (.sācnicn̥ < .sācricol), **23** (but see below); *inai* (.in`nai, early Latin *illae,* Sommer, p. 430), **9**; *Enaś* (.en`nās < .elyās), **21**, etc.

But this change may be inhibited by (1) a neighboring *n*: *Venel,* **13**; *cianil, canulis,* **12**; *munile* (.mo`nīlę̄, Latin *monelae*), F.I 398; *palamneus,* βαλανεύς, F. 2341; less often (2) by neighboring *r* or *l*: *vi-ti-le-ra,* **14**; *śacnicleri,* **21***e*, *śacnicla*(*l*), but *sacnicn* (in spite of the preceding *n*); *Xarϑillas,* § 98; (3) by persistent *y*: *Caliaϑesi* (.gal`yātēsī, Latin *galeātī*), F.I 398; *c*(*a*)*-va-li-ya,* **14**; and (4) perhaps by .*w*: *Veil*(*i*)*a,* etc.

The reverse change, namely *n* > *l,* I have found only in *cilϑl* (.giltl̥ < .gint-al), **21***e*, and *Truials* (.trōyāls < .trōyāns < .trōyānos, Latin *Trojanus*), F. 2162.

68. Occasionally an *l* (doubtless palatalized) becomes *i* or *y* as in modern Italian: *Piute* (.piote) by the side of *Plute* (.plote), *Plaute,* Schulze, pp. 211, 230. Peculiarly difficult is *puia* (pronounced .pwi`yā), 'wife,' F. 425, etc., early genitive *pvele* (.pwel`lę̄), **18**. I do not know what Buck had in mind in insinuating[15] that Etruscan *l* became palatalized before *s*. Possibly he was only echoing *Planta,* I, § 149.

69. As in Umbrian (Buck, § 105, 2) an *l* tended in later Etruscan to assimilate to a following *t* or to disappear before it: early *pulϑes* (.pol`tēs, with the ending of an *i*-stem), Ga. 912 *bis,* later *puϑs* (.po(t)ts < .polts, Latin *pultis*), *Mu.* 8.12, and plural *pute* (.potte), **21***c*. Similarly *Velϑuruś,* F. 746, etc., but later *Veϑurus,* Ga. 385, 551. Double *l* persisted before *t* even in the late Etruscan of the Mummy Manuscript: *tulϑans* (.tol`tāns), *tulϑansur* (.toltānsor), **21***c, d*.

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[15] Buck, § 105, 3.

70. An *l* like English *l* in *well* (that is, with a tongue contour similar to that of *w*) could develop out of a *w*:[16] *lescul* (.lēscǭl), **19**.7. This appears most frequently in numeral adjectives ending in Italian Etruscan in *-ls,* Indo-European *-wēs, -wents,* § 97. For *l* from the labial element of the labiovelar, see § 60.

INTERVOCALIC *s* > *r*

71. As in other Italic, an intervocalic *s* very early became voiced (that is, .z), which it remained in Oscan. In Etruscan, as in Latin and Umbrian, but evidently much earlier in Etruscan than in Latin, in fact before *eu* became *ū,* this *z* became *r*: *eurat* (ˋ.*eurād*), **19**.1; *ārāś,* **19**.6; *erut* (ˋ.erod), **11**; *Lareceś,* **17**; *isairon,* **11**.

As in Latin (for example, *honor* for *honos*), such an *r* could by analogy displace the final *-s* of the nominative, and such a nominative could be used as an accusative: *Cerer,* 'Ceres,' *Mu.,* 7.23.

The development of *s/z* in *-res-/-rez-* seems to vary.

(1) The *z* may become *r* and *-rer-* may suffer teleterosis (§ 32) to *-ren-: Cereni* (.cereˋnī), Latin *Cereri,* **21***a*. This *n,* like the *r* out of which it arose, may also appear in the nominative-accusative.

(2) The *-rer-* may suffer syncope (compare Oscan *Kerrí,* 'Cereri,' and Latin *Cer*(*r*)*us*), and the two adjacent *r*'s may be shortened and the preceding vowel lengthened, as in the case of original *-rs-* in Oscan. This is probably the history of *-er-* in *Seronai, LS*. 3; the *e/i* of Celtic-Latin *Sirona* certainly points to this development. (See *LS*., "Excursus I.")

(3) The change of *z* to *r* may be inhibited by the preceding *r,* as in *Tavarsio* (ˋ.tauərzyo < *tauresyos), *LS*. 13. This diversity in the treatment of *-res-* may be due in part to the fact that these words are proper names and part of them of foreign origin.

The earlier *s/z* (spelled *s*) is occasionally found in names, doubtless as an archaism intentionally preserved, like the *e* of *England,* while the *e* of *streng* was changed to *i* when the word came to be pronounced *string.* Compare *Navesial, CIE*. 3894, by the side of *Naverial, CIE*. 3895.

72. As in Latin, Old English, and various other languages, Etruscan had a tendency to anticipate the opening of the nasal passage and to neglect the closing of the oral passage which are necessary for the making of a nasal consonant before a voiceless fricative, as in the case of *ns.* In this way the preceding vowel was nasalized, the consonantal *n* disappeared, and the time originally spent in making the short vowel and the nasal consonant was spent in making a long nasal vowel. That is, .ans became .ãs.[17] In the course of time the opening of the nasal passage was neglected and thus a long pure vowel took the place of the long nasal vowel. In other words, .ans > .ãs > .ās. As in Latin (Sommer, p. 245), it would appear that this shift was earlier in some cases (for example, in the accusative plural) than in others. *-ans, -ons, -ins,* etc. > *-ãs, -õs, -ĩs,* etc. > *-ās, -ōs, -īs,* etc.: accusative plurals like *aras peras* (.ārās .perˋrās), **19.6**, *ϑauruś* (.taurōs), *CIE.* 4082, *avis* (.awīs), *LS. 7*; genitives of *n*-stems (§ 15) like *Velus* (.weˋlōs), **24**, *Ezpus* (.estˋpōs), **24**, etc. Similarly, *cē(a)n,* 'five,' doubtless lost its *n* first in counting, that is, before the *s* of the following *śa,* 'six,' § 98. For later *-ns* < *-nts,* see § 65.

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[16] For the reverse change of such an *l* into *w* in Umbrian, see *Planta,* I, § 143 (Buck, § 104).

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[17] Cicero observed the phenomenon, but his description shows that he did not clearly apprehend it, and modern scholars usually quite misunderstand the matter. When the vowel had become long, there no longer was a following nasal consonant.

MORPHOLOGY

73. A conspectus of case-endings is as follows:

	ā-Stems	o-Stems
Singular		
Nom.-Voc.	-ā, -ǭ, -ās	-os, -o, -e
Gen.	-ās, -āsī, -āī, -ę̄	-ī, -īal, -ēs, -ēsī
Dat.	-āi	-ōi, -ō
Accus.	-ā(m), -ǭ(m)	-om, -o, -e
Ablat.	-ā(l), -ǭ(l)	-ō(l)
Locat.	-āi, -āil	-o(l)
Plural		
Nom.-Voc.	-āi, -ēi, -ę̄, (-ais)	-ē, -ī; -ā, -ǭ
Gen.	-āōm -ārom, -āsōm -ās, -āsī, -aiāsī	-ōrom
Dat-Abl.	-āis	-īs
Accus.	-ās, -āi, -ę̄; -āis	-ōs; -ā, -ǭ

NOTES ON THE CASE-ENDINGS

ā-Stems

74. The *nominative singular* ends in *-ā* if the ending is stressed or if it is preceded by an *r*:

Menrvā
\`*Auśvā* < *ausrā (cp. *ϑaurā* = .taurā)

Otherwise the case-ending is *-ǭ*.

\`*Rāmϑû*
\`*Cērinû*, **24**.

As in Old Latin, Oscan, and Greek, the masculine *ā*-stems added *-s* by analogy to masculine *o*-stems, if we may generalize from a single word, ***marās***, *LS*. 4.

A considerable number of masculine *ā*-stems are of secondary formation, being in reality ablatives or genitives of feminine names of families.

75. In the *accusative singular,* the *-m* early disappeared (phonetically in unstressed endings, analogically in stressed endings).

prvnā, F. 2292; *aciām,* **13**
Ruvmiā ("Excursus III")
ścunā cēnû = *.secundām cēnām, **19**. 10
ϑaurā helû < *.taurām hēslām, *PC.*, 21
uvā in *pulϑes uva* = 'pultis offa,' **26**

76. As for the *locative-genitive,* the case endings typified by Old Latin *viāi, viāī, viās, viād* were all originally locative suffixes, that is, demonstrative particles with adverbial or prepositional function.[1] Apparently the type *viās* assumed genitive and ablative functions, only to be supplanted by *viāī* (*viae*) used as a genitive, and *viād* (*viā*) used as an ablative. Such transformations are familiar to us in adverbial phrases like "the Bishop at Strassburg" = "the Bishop of Strassburg," "in this way" = "by this means," et cetera.

In Etruscan the following forms occur:

Enās (*Mu.*, 7.23) = 21*a*
Seāsī (*LS.* 3)
Seronai, Sivai (*LS.*)
Θ*āmcv*(*i*)*lei* (F.I 398) = .ǣi?
pvelẹ̄ (18)

The ending *-āsī* is a contamination of the endings *-ās* and *-ī,* comparable to *tāsōm (Sanskrit *tāsām*), and Latin *viarum,* *viā-s-ōm, in which *-ās* and *-ā-ōm* are blended.

The locative proper appears in *to Veronai,* 'at Verona,' and *Morinail,* 'at Myrinna' (*LS.*).

The locative-genitives in *-ās, -āsī* are parallel to those in *-ēs, -ēsī* (§ 85); and the locative-genitives in *-ai, -ail* are parallel to those in *-ī, -īal* (§§ 85, 86).

[The endings *-ẹi, -ẹ̄* are, of course, phonetic developments of *-ai,* such as we find in Vulgar Latin. As in the plural (§ 79), the ending *-ẹ̄* probably occurs only after liquids.]

77. In the *locative-ablative singular,* if the ending was stressed or preceded by an *r,* it was *-āl;* otherwise it was -ǭl. In most texts, however, the final *-l* has disappeared, like the final *-d* of early Latin to which it corresponds, the *-l* being the regular phonetic development of intervocalic *-d-* (§ 66). Compare the inscription on the Formello Vase (Torp, *EB.*, I, 16): *mi Atianai ā* X*apriā lice venelisi,* etc. Also: *arā, Mu.*, 11.8; *avcvā,* F. 2292; *vesicā*(*l*), F. 2301; *cemûl m lescûl,* 19.7.

Apparently the ablative in *-d* arose in *e/o* stems which, in Indo-European, had the endings *-êd, -ôd,* that is, with circumflex accent, which suggests that they are the result of a contraction. As we shall presently see

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[1] [Dr. Hempl considered that the parallelism between the place of articulation of many demonstrative particles, etc., and their meaning, had a genetic significance. Such words as *tu, iste, ego* (tongue withdrawn) contain, as it were, *gestures executed with the tongue.* It is therefore not by chance, he would say, that locative suffixes contain a high front vowel (*i*) or a front consonant (*s, d*). Unfortunately I can find no trace of his lecture notes on "The Genesis of Grammar" where this theory is developed. Hungarian supplies some interesting corroborations of it.—F. A.]

(§ 86), Etruscan had a genitive in *-al* < *-*ad,* originally a locative formed by adding the preposition *ad,* 'to,' 'at,' etc., to the stem. The circumflex accent of Indo-European *-êd, -ôd* suggests that the ablative in *-d* had precisely the same origin. The Etruscan postpositive *-ad/-al* is therefore a repetition of the process which, in Indo-European, gave an ablative in *-êd, -ôd.* The *-l* of the locative *Morinail* above is a relic of this earlier development.

78. The *dative singular* of *ā*-stems ended in *-āi* (< *-a* + *ai*) :

Atianai (Formello Vase, cited in § 77)
purenai eϑ verai Liśipiϑi, **16**
'to the most pure and true Lesbian'

79. The *nominative plural* ended in *-āi* adopted by analogy to the *o*-stems, which had *-oi.* As in the case of the genitive, this diphthong became regularly *ę̄i* or (after *l* and *r*) *ę̄* in the later language.

ao̭mai, LS. 32
faśę̄i = Latin *farsae, Mu.,* 5.20 (Torp, *EB.,* II, 37)
zēlę̄ = Latin *stellae,* **26**

80. In the *accusative plural,* we find three endings: *-ās* (< *-āns*) as in Latin; *-āi,* which is the nominative used as an accusative; and *āis,* which is a blend of the first two.

araś peraś, **19**.6
priϑaś = Latin *praedas* (*Mu.,* 8.4) (cp. Old Latin *prī* = *prae*).

In the Monte Pitti inscription (see **14**) :

ϑāpintās occurs by the side of
ϑapintāis and
aprēnśāis = Latin *apprēnsas.*

The development of this ending left only two distinct case suffixes in the plural (cp. English *children, children's*) :

nominative vocative accusative dative ablative	*-āis*
genitive	*-āiāsī*

81. The *genitive plural* appears in various forms: *zilaϑ eterav* (F. 2055, F.III 327, Pauli, *ES.,* I, 16), 'judge of infants,' or judge having jurisdiction over property rights of minors, presents the original Indo-European ending *-ā-ōm* with final *-m* lost. *Paχaϑuras,* 'of the Bacchic brothers' (*T&H.,* No. 47), and *Precuϑuraśi,* 'of the brothers of Precus' (*CIE.* 4116), have the singular genitive ending used as a plural. This ending spread to consonant stems; cp. *clenar-asi,* 'of the sons' (*CIE.* 4116);

tnuc-asi, 'of nuts' (20). Then, on the model of the nominative-accusative *clenar,* genitive *clenarasi,* there was formed, on the basis of the nominative-accusative type **nacnvai,* a new genitive *nacnvai-asi* (F.I 398), 'of the children,' genitive plural of *nacn(v)a.* Thus the genitive plural ending *-aiasi* is an agglomeration of two endings, the *-ai* of the nominative-accusative and the *-asi* of the genitive.

The early combination of the locative-genitive in *-ās* with the genitive in *-ōm* (as in Latin *viarum*) is well illustrated by *ϑumarvm,* genitive plural of *dōmā, 'gift,' with suffix *-mā,* 16 (Brugmann, Vol. II, Part I, p. 635); cp. *dōnum,* δῶϱον. The word occurs on a very early inscription on a votive cup (F. 2404, Caere) = 16.

82. The *dative-ablative plural* seems to have been parallel to the Latin: *zil eterais* (F.I 436; Pauli, *ES.*, I, 17; Torp, *EN.*, p. 21), 'judge presiding over (cases concerning) infants'; cp. *zilaϑ eterav* above. It is, however, possible that *eterais* is by origin a locative, with *-i* and *-s* added to the *-ā* of the stem.

o-Stems

83. *Nominative singular:* As in Latin, at a very early date, masculine *o*-stems having an unstressed sonorant (*l, m, n, r*) before the *o,* syncopated the *o* and permitted the final *-s* to assimilate to the sonorant and thus to disappear: *aker, LS.* 12; *vanal* < *bhaməlos, *LS.* 14; *Venel,* 13.

Other *o*-stems, including those having a sonorant before the *o* but without a preceding weak syllable, did not suffer syncope; although, of course, the original forms with *-os* are found only in the oldest inscriptions:

Qhrunus (F. 2341, Pl. XLII) = Latin *Cronos*
fanurus (F. 2309) < *dhamlos = *famulus*

At a time subsequent to the loss of final *-m* before a short vowel (§ 61), final *-s* disappeared before the initial consonant of a following word, and these shortened (preconsonantal) forms were subsequently generalized (compare English 'my eyes' instead of earlier 'mine eyes,' and the vulgar 'a apple').[2]

The *-o* which thus came to stand at the end of the word and was always unstressed gradually suffered obscuration, ultimately becoming the forward mid-central vowel ə, which was written with the letter *e.* At the time when the inscriptions were cut on the Lemnos Stone the obscuration had not yet gone far, and the vowel was still usually written *-o,* the difference not being observed unless there was a pure .o close to it, as in the word *φoke.*

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[2] The same loss of *-s* after a short vowel and before an initial consonant took place in Lycian and in Old Latin, but in Latin the fuller form ultimately prevailed, just as the *-n* of *on,* which was often dropped before an initial consonant in Middle English, is now always fully sounded.

Lemnos: *evisϑo, haralio*
φoke, Tavarsio

Other texts:

φericaru, Latin *percarus, puru* = Latin *purus* (F. 2343, *EEI.*).
Runru (F. 2307) < *romros = Latin *Romulus*
leśe, Latin *lessus,* 'lamentation' (Ga. 799).

84. *Accusative singular:* Final *-m* disappeared at an earlier date than did final *-s,* and apparently the *-o* which remained vanished likewise, instead of becoming ə as the *o* of the ending *-os* did later. This would give nominative *leśe* < *lesos, accusative *leś* < *lesom. But since nominative and accusative were alike in neuters and in most feminines, the nominative singular masculine was used as an accusative.

85. *Genitive singular:*

φokī, LS. 19; *caresrī, CIE.* 4116
Holaiēs, LS. 1; *Aelχēs,* 1
Hoľaiēsī, LS. 18; *Ucuniesi,* F.I 398
L. Titeśi Caleśi cina, CIE. 48, 'Ashes of L. Tite Cale'
ϑuϑiial, 'of the state,' Ga. 912 *bis,* Umbrian *tota;* cp. 26
aśial, LS. 15; *aśiale, LS.* 20, etc.

The genitive singular of *o*-stems ended in *-ī* in Celtic and Latin, and in Latin we find this ending at a time when the locative still ended in *-ei.* Both cases were originally locatives, however. There were two locative-demonstrative endings, *-ī* and *-ĭ.* Added to the *-e-* of the stem they gave respectively *-eī* and *-eĭ.* The former, *-eī,* very early became *-ī*; that is, the *e* was absorbed by the following long vowel. The second form with short *-i* remained *-ei* much longer.

If this genitive in *-ī* ever existed in Oscan-Umbrian, it was very early displaced by the genitive ending of the *i*-stems, namely, *-eis,* which regularly became *-ēs* (later *-ēr* in Umbrian). In Etruscan, too, this *-eis* of the *i*-stems became *-ēs* and spread to the *e/o* stems, but it did not wholly displace *-ī.* Thus, in the *e/o* stems we find sometimes *-ī,* sometimes *-ēs,* and sometimes a blend of these two, *-esi.* (See §§ 80, 81.)

86. The genitive in *-al* is justly considered one of the most characteristic features of Etruscan. This ending was originally the intervocalic form of the preposition *ad,* 'at,' used postpositively like the *co*(*m*) of Umbrian *asa-ku,* 'at the altar,' or *e*(*n*) in *fesnafe,* 'to the temple.' (For *-d-* > *-l-,* see § 66.)

In Etruscan the victory of the intervocalic form *-al* was probably aided by the existence of the bye-form *-ale* from *-ad* + *i*, that is, with added demonstrative-locative *-i*. (See Brugmann, *Gr.*, II, Part 2, § 185.)

The distribution of the three genitive endings *-i*, *-es*, and *-al* in the inflection of an adjective is well illustrated in the Mummy Manuscript:

positive	*śpur-al*	*sacnicl-a(l)*
comparative	*śpur-er-ī*	*sacnicl-er-ī*
superlative	*śpur-eśtr-es*	*sacnic(l)-(e)śtr-ēs*

śpur-al (*Mu.*, 5.23; also F. 103, *CIE.* 3), Latin *superi*. *śpur-er-i* (2.8). The use of the comparative ending *-ero-* (Brugmann, *Gr.*, II, 323) was not restricted in use in Etruscan as it was in other Indo-European languages. In *śpur-eśtr-es* (*Mu.*, 3.21) we have a superlative with the ending *-estr-*. Indo-European *-is-tero-* is generally accounted a comparative, but here it clearly is a superlative. *śacnicla(l)* (*Mu.*, 5.22) is the genitive of *śacnicn* (21*e*), in which the *-l-* has normally become *-n-* (§ 67). In *śacnicl-a(l)* and *śacnicl-eri* it would appear that this was inhibited by the following *l* and *r*. Observe, however, that in *śacnicla(l)* the second *l* was eventually lost by teleterosis. For *śacnicleri*, see 21*e*; *śacnic(le)stres*, *Mu.*, 5.3. Parallel with *śpureri* and *śacnicleri*, we have *meϑlumeri* (21*e*); but by the side of *śpur-al* and *śacnicl-a(l)*, we find *meϑlum-eś* (*Mu.*, 5.23), not **meϑlum-al*. The disposition made of the genitive endings in the Mummy Manuscript was not universal usage but a special development. Thus, the positive may have *-ī* or *-ēs*: *meϑlumi* (Ga. 799), *cri*[3] = penalphabetic writing of *cārī* = *cārēs* (F. 1933); and the superlative may have the ending *-ī*: *caresri* < *carestrī (*CIE.* 4116).

86a. *The "genitive squared."*[4]—The use of *-al*, *-l* as a supplementary genitive ending, following or preceding another genitive ending, led to one of the most characteristic Etruscan developments, namely, the heaping up of genitive endings. Thus we find not only *Aśī-al* (*LS.* 15), *ϑuϑiial* (26), *zecsanś-l* (§ 98), and (with vaulted *l*) *Veluś-la* (F.I 430), *Velϑuruś-la* (F. 437), *Velus-a* (with *l* lost, *CIE.* 1717), also *Velϑurus-a* (*CIE.* 847); yet more complex are *Arnϑi-al-iś-la* (Müller-Deecke, II, 496), *Ciarti-al-is-a* (1), *Larϑal-is-a* (*CIE.* 893), et cetera.

Most of the double genitive endings mentioned above are used as the simple genitives would be, but those in *-eśla*, *-uśla*, *-aleśla* denote what has been regarded as a genitive of a genitive, or "genitive squared" (§ 12). Thus, while *Velϑur Velϑurus* (F. 2117) is literally 'Velthur Velthur's [son],' *puia Larϑl Cuclnies Velϑuruśla* (F. 437) is literally 'the wife of Larth Cuclnie Velthur's [son]' (see also Skutsch, *PW.*, 794–95). This view of the matter is, however, more mechanical, or mathematical, than actual. In the first place, it should be noted that (as was to be expected) this phenomenon is limited to proper names. We shall understand the real nature of the usage when we consider that the adding of the genitive of the father's name to the son's name is short for adding the word *clan,* 'son,' with such a genitive. It is exactly parallel to *William William's son,* later *William Williamson.* In other words, *Velϑurus,* like *Williamson,* had become a patronymic, and virtually no longer contained a genitive. In English, the genitive ending *-s* was lost in the *s-* of the following *son;* in Etruscan the word *clan* was omitted. That is the only difference between the two, except that *Williams* later passed from a patronymic into a family name. The process is very much the same as that whereby the added genitive or ablative of the feminine name of the family became the masculine surname of the man; for example, *Larϑ Melisnas* (Ga. 593), and *Se*(*ϑre*) *Velϑurna* (F. 1481). In *Velϑur Velϑurus* above, both words are virtually nominatives[5] like *Larϑ Melisnas* and *Seϑre Velϑurna* and *William Williamson.* When there was occasion to use such a double name in the genitive, the Etruscan added a genitive sign to each word, while we prefix *of* to the whole or add *-s* to the last name. Thus, *the wife of Larth Cuclnie Velthurus* is *puia Larϑl Cuclnies Velϑuruś-la,* while in *William Williamson's wife* we leave the given name uninflected. Compare *T&H.*, No. 55:

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[3] Montélius, *La civilisation primitive en Italie*, Texte, pp. 459 f.

[4] From "The Tuscan Tung."

> *Laris-al Larisal-iśla Θanχvilus Calisni-al clan-l; avils huϑnars*
> '(Tomb) of Laris Laris-son, child of Θanχvil Calisni; four years'

87. The *ablative* ended in *-ō*(*l*) : *eku,* 'with this,' Ga. 912 *bis; hinϑiū̯,* '(in the) subterranean,' **8**. See § 77.

88. The *dative singular* ended in *-ōi,* later *-ō.* The former ending occurs twice in the archaic inscription F. 2400 *d, alaφoi, cluoi.* *-ō* occurs as early as the Magliano inscription: *tiu* (.dēō < **deiu̯oi,* Latin *deo*), and in the famous inscription F. 2753 which contains words of such obviously Italic character that it has been denominated as "mixed Oscan-Etruscan." Here we find *Viniceu,* 'to Vindicius.'

89. The *nominative plural* masculine has, like Latin, the originally pronominal ending *-oi,* which becomes successively *-ei* > *-ē* > *-ī* : *qvi, pace,* **6**.

90. The *accusative plural* masculine of *o*-stems likewise corresponds to the Latin:

> *ϑauruś* (*CIE.* 4082)
> *aiseraś śeuś,* 'these divinities' (*Mu.,* 5.8)

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[5] But we also find, even at a late date, the original usage, in which the word *Velthurus* is felt to be a genitive and therefore has no second genitive ending added:

> *Mi Larϑia Hulχenas Velϑurus cles* (F.III 306).
> 'This (is) Larthia (daughter) of Hulχena, the son of Velthur.'

91. *Neuter plural nominative-accusative:* In Etruscan the *-ā* of this ending (originally the same as the feminine singular) appears as *-ā* if stressed or preceded by *r,* otherwise as *-ǭ* (see § 41).

cina (*CIE.* 48)
uśa laśa, Latin *ossa lassa,* 'weary bones,' **18**
iśmu < **insma,* 'remains,' Latin *ima,* **18** (*T&H.,* No. 17)

92. The *genitive plural: cerurum* < *cēreōsom, Latin *cereorum,* genitive plural of *cereus,* 'wax taper,' *CIE.* 4116.

93. The *dative-ablative plural* appears with original *-ois* reduced to *-īs,* as in Latin: *teis* = .dēīs (*Magliano Tablet,* 11; *PC.,* 4; *Mu.,* 10.16).

THE ETRUSCAN NUMERALS

94. Our knowledge of the Etruscan numerals is chiefly based upon two dice which, in place of dots, have the numbers written out as words (F. 2552).

Deecke observed (*BB.,* I, 265; see Skutsch, *PW.,* 802.7) that if the dice are so placed that the word *maχ* stands alike on both, the same sides show the same words on the two dice; but if any other of the six words is so treated, the corresponding sides of the two dice will differ. Then the engraver must have begun with the word *maχ*, and *maχ* is consequently the word for 'one.'

If we assume that the engraver put the first four numbers in succession around the die, and then put the remaining 'five' and 'six' on top and bottom, we get the following order:

1	2	3	4	5	6
maχ	*ϑu*	*zal*	*huϑ*	*ci*	*śa*

This arrangement (originally suggested by comparing the Etruscan words with Indo-European) was long ago proposed by Campanari (see Fabretti, *Terzo Supplemento,* p. 4). Although unusual, it does occur on other dice with dots instead of words (§ 16 n.).

95. That the word *ci* actually means 'five' is exceedingly probable. We have an inscription (*T&H.,* No. 56; see Introduction, § 17):

LV *celc ceanuϑ*

which in all likelihood means

'55 fifty-five'

That is, the number was indicated by means of letters and the number-words then written out in full.

Further corroboration is furnished by the bilingual inscription F. 251, and F.II, page 28 = *CIE.* 428 (see *EI.,* **1**, below):

aelχefulniaelχes
ciarϑialisa
Q. Folnius. A. f. Pom.
Fuscus

The *Pom* of the Latin version stands for *Pomptia natus* and corresponds to the Etruscan *ciarϑialisa,* genitive of the family name *ciarϑi.* Now, *Pomptia* is the feminine form of the name which occurs in Latin as *Pontius,* itself based on the Oscan-Umbrian cognate of *Quintus.* This may explain why *Quintus* was substituted for *Aelχe* in the inscription. Be that as it may, the correspondence gives us the following equation:

Latin	*quint-*
Oscan-Umbrian	*pompt-*
Etruscan	*ciart-*

The ending *-arϑ* of the Etruscan form is due to the analogy of the preceding ordinal *xvarϑ* (§ 99). This leaves *ci* equivalent to Latin *quinque.*

Finally, we find in the inscription on the Perusian Cippus (*EI.*, **19**), line *a* 15, the words *hen XII naper.* and, below, what appear to be instructions concerning the disposition of these twelve *naper,* whatever they may be—

line *a* 15: *naper-zl,* that is 3
line *a* 16: *hut naper* 4
line *a* 24: *naper ci* 5

Since all three numerals are certainly below seven it seems rather likely that collectively they are the twelve mentioned above. Then any identification of the numbers on the dice ought to satisfy the equation *zal* + *huϑ* + *ci* = 12, which is the case with Campanari's proposed translation.

Multiplicatives

96. There are various numerals ending in *-z, -zi,* or *-si,* which have generally been taken to be multiplicative adjectives (Skutsch, *PW.*, 800.24). To these should be added the forms *meani, ceanil,* etc.[1]

The ending *-ezi* is usually preceded by the regular (non-adjective) form of the numeral, but in the case of some of the forms for 'twice' it has *-ne-* before it: *ϑunz, ϑunesi.* It happens that *ϑu* is the only one of the numerals ending in a vowel whose multiplicative occurs in the inscriptions (I have not found the word for 'six times,' and *ce* is for older *cen, cean* < *qenq). It thus appears that we here have preserved after a vowel the full ending which, after a consonant, lost its *-n-*. This points to *-iens,* the ending used in Latin to form the multiplicatives from 5 on. This *-iens* is from *-ient* (Sommer, p. 474). Etruscan *-z* represents the stage *-ts,* later *-s*. It is therefore wrong to suppose that the change *-nt* > *-ns* took place in common Italic times (Sommer, p. 277).

The forms in *-zi* and *-si* probably owe their *-i* to analogy of *meani,* 'once.' They are obviously later than those in *-z,* and tend to develop an epenthetic ə. *zaleśi* is to *eslz* (from still earlier **zalz*) as baby-English *threed* is to *third.* Another and later analogical form is found in *zati zatlχne*

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[1] [The forms have been grouped under their respective roots below, § 98.—F. A.]

(*Mu.*, 8.13), '33 times.' This *zati* seems to have *zat-* from *zaϑrm,* 'thirty,' and *-i* from *meani,* 'once'; while *zatlχne* has taken the last syllable of *meani.* *ϑuesi* for older *ϑunesi* is due to the analogy of *zaleśi.* For the *es-* of *eslz,* see § 97. The late forms *huϑis zaϑrumis* found in the Mummy Manuscript are probably from -ə*si,* the *i* representing a neutral vowel.

meani is a spelling for .mēəni from *mēni, with vowel fracture. This, in turn, is from older **meli* (for $l > n$ see § 67) < *smeli, Latin *semel,* Gothic *mel,* German *-mal* in *ein-mal,* etc. *ceanil/cianil* is from **qin-meli,* final *-i* being early lost after unstressed syllables. The usual change of $l > n$ was here inhibited by the preceding *n.*

The rareness of the multiplicatives of the tens is explained in part by the fact that in Etruscan (except in the Mummy Manuscript) the tens had no multiplicative endings when they were accompanied by units provided with such endings: *meani municl-eϑ,* 'once and ninety' (F. 2339). In part it is due to the fact that an office is not often held more than ten times.

The Etruscan multiplicatives might be used to mean 'so and so many years,' as in *T&H.*, No. 48: *cianil puia,* 'for five years the wife of.'

THE TENS

97. The tens are formed with the suffix *-lχ or -alχ* (.l̥c/.əlc) < .lec < .dec < .decm (with regular change of medial $d > l$), corresponding to Germanic *-teg-* seen in the *-ty* of *six-ty,* and to the *-g*(*int*)- of Latin *viginti.* Compare *celc,* 'fifty,' found on one of the Toscanella inscriptions (*T&H.*, No. 56); *meani municl-eϑ,* 'one and ninety times' (F. 2339).

Usually the tens appear in adjectival form and with the Indo-European adjectival suffix *u̯ēs, u̯ents,* seen in Avestan *vīsaiti-vant-,* 'twenty-fold,' Greek τετρᾶς, -ᾶντος, etc. (Brugmann, II^1, § 182.2; II^2, § 356). This *-u̯ēs* appears as *-veis* and *-vis* (*śialχveis, śialχvis,* 'sixty') on the Lemnos Stone (*LS.* 6, 28). Being weakened in unstressed position, it becomes *-os,* as in *cealχus* in the Mummy Manuscript (cp. Latin *soror* < *suesor), or *-l̥s* (with 'dark' *l*) in most Etruscan. Compare *cle,* 'and' < *χue* (§ 100).

In southern Etruria and in the dialect of the Mummy Manuscript the final *-s* of this adjectival suffix was analogically added to *maχs, esals* (F.I 387), *huϑs* (F.II 115), *cis χis, semφs* (F. 2033 *bis* D. c), etc., but only when these numerals were used as adjectives.

RADICAL ELEMENTS OF THE NUMERALS

1. *maχ*

98. The word for 'one' is likely to be a compound or a conglomerate. Latin *unus* and our *one* are from *.oi̯-no-s, by the side of which there were *.oi̯-u̯o-s and *.oi̯-co-s, the last being seen in Sanskrit *ē-kā-.* Then there is *.sem- or *.sm̥, reflected in Greek εἷς, 'one,' Latin *semel,* English *same;* compare 'one and the same,' etc. Now, it is not difficult to recognize in Etruscan *maχ* (.māc) this *.sm̥- combined with the .cā seen in Sanskrit *ē-kā-.* For the Etruscan represents the feminine, like Greek οἴνη, 'the number one,' as on dice, and German *die Eins.* This primitive *.sm̥-cā became in Etruscan *.m-cā and then, by metathesis, .māc; compare Greek μία < *.sm-ia, and Sanskrit *ē-kā* from *.oi̯-ca. *Un* (.ōn), 'one' < *.oi̯nom, is frequent in the Mummy Manuscript.

2. *ϑu*

.du = Latin *duo.* For the loss of *-o,* see § 50. The root occurs in *ϑvna puia,* 'second wife' (*T&H.,* No. 4, Clusium); in *ϑis* < *du̯is, 'twice,' on the Lemnos Stone (*LS.* 39), and in the multiplicatives *ϑunz,* F. 387; *ϑuneśi,* F. 2337*a*; *ϑueśi, Mu.,* 10. (*ϑunzri* also occurs.)

3. *zal*

.tsāl < *tsār < *tsərā < *tisərā, Avestan *tišrō,* Sanskrit *tisraḥ,* etc. (Brugmann, II², p. 12). There is also a weak form with prothetic -ə; cp. *esals,* F. 387 = .əsāls, which probably arose in such conjunctions as *zaϑrum* ə`*salm̥,* 'thirty-three.'[2]

The word for 'thirty' is *zaϑrms* (F. 2071), *zaϑrums* (F.I 388) = .tsātrəms < *tisəra-decṃ which became *tisārdəcm̥ > tsārtm̥ > tsātrəm. Also, *eslz,* 'three times' (F. 2335*a*), *zatlχne,* 'thirty times' (*Mu.,* 8.12), with analogical addition of the suffix *-lχ-* which normally does not appear in the word.

4. *huϑ*

The *u* probably represents an *-o.* The earlier form of the word is *huϑnars* (*T&H.,* No. 55) and a still earlier form occurs in Ga. 804.3, *futuar* = .h̤otu̯ər < *cu̯etu̯ər, with dissimilation of the stops *c-t.* For the change of .h̤otu̯ər > .hotnər, compare *u̯* > *n* in *Fulni* from *Fului* (*CIE.* 428). [The final *-nar* was probably dropped to make the word conform to the monosyllabic pattern of the other numerals: *maχ, ϑu, zal, huϑ-*(*nar*), *ci,* etc.] The multiplicative *huϑis* is found in *Mu.,* 8.3.

The ordinal occurs in the names Χ*varϑv χartillaś sez,*[3] 'Quartas, offspring of Quartillia' (F. 466 *bis*). Deecke (*Kritik,* p. 15) thought that these names were borrowed from Latin, like Cvinte. However, the inscription in which they occur is clearly a relatively old one (to judge from the form of the letters) and presents the regular early Etruscan treatment of .cw, the labial element being lost in weak position (X*artillas*).

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[2] The first syllable of this form seems to have received the stress in late Etruscan, the ə becoming *e.* Compare *eslem zaϑrum* (*Mu.* 11.8). All the forms with initial *e-* are relatively late.

[3] *sez* = .sets < .sects < .segets, Latin *seges.*

5. *ci*

Etruscan presents two sets of forms with *cī* and *cē,* respectively, from earlier .cīən, .cēən (spelled *cian, cean*) which are from *qīn, *qēn, parallel with the .qin- of Latin *quindecim.* In counting, *cean,* standing before the *ś* of *śa,* 'six,' was likely to lose its final *-n,* whence the forms *ce* and *ci.* In *T&H.,* No. 56, we find *ceanuϑ*, which has assumed the ending of the preceding numeral *huϑ*.

The same inscription presents *celc,* 'fifty' (without the adjectival suffix). Elsewhere we find *celχls* (F.I 437), *cealχls* (F. 2108), and in the Mummy Manuscript *cealχus, cialχus* (see § 70).

Multiplicatives: *cizi* (F. 2339) and *cianil puia,* 'for five years wife of' (*T&H.,* No. 48).

The ordinal appears in the proper name *Cearϑiś* (genitive), 'of Quintus' (F. 1642), which has assumed the ending of *χvartv* (§ 99).

6. *śa*

śa, like *maχ,* is from a feminine abstract: *csā < *tsecsā, the inflected form of *.tsecs seen in *zecsanśl* (F. 1930 = *CIE.* 4561), a genitive singular corresponding to Latin *sexennis.* The original form of the root was probably **csecs,* to judge from the variant forms of the proper name: *Secstinal* (*CIE.* 1057, F. 982); *Scesctna* (F. 440 *bis, c;* Pauli, *CIE.* 254, arbitrarily reads *sesctna*); *Sesctna* (*CIE.* 250); *Sescatna* (*CIE.* 252); *Sesuctna* (*CIE.* 255). The usual ordinal ending (§ 99) appears in *Sexartesi* (F. 2184), genitive singular.

7. *semφ*

.semp < *sepm̥ < *septm̥. *avils semφs lupuce,* 'she lived seven years' (F. 2033, D. c; see Skutsch, *PW.,* 776.44); *semφalχls,* 'seventy' (F. 2070); *selvansl,* 'seven year old' (*CIE.* 2403), parallel with *zecsanśl* above; *Semϑni* (*CIE.* 3965), Latin *Septimus; Zemnal* (*CIE.* 2280) = .tsemnal(?).

The names *Seϑume* (*CIE.* 3755, Perusia), *Setume* (*CIE.* 1245, Clusium), etc., are borrowed from Latin, via Umbrian, cp. *Sehtumnal* (*CIE.* 4098), *Sehtumial* (*CIE.* 4287), etc., or directly from Umbrian.

8. *cezp*

We assume a primitive sequence:

	6	7	8	9
I.	tsecs	sepm̥	oc	nou̯m̥

*sepm̥ and *nou̯m̥ have the same final sound; *tsecs and *sepm̥ have the same vowel; *tsecs and *oc share one consonant, *c*. In any sequence which is mechanically recited, such similarities are apt to be exaggerated, and in the present case, *sepm̥ and *nou̯m̥ being paired, *oc is gradually assimilated to the mate *tsecs, assuming first the final *-s* and then the vowel *e*. (Notice that this gives a sequence of three forms with this vowel.)

II. tsecs sepm̥ ocs nou̯m̥
III. tsecs sepm̥ ecs nou̯m̥
IV. tsecs sepm̥ cets nou̯m̥[4]

The form *cets is, so to speak, the phonetic converse of *tsecs. At a later date it became *cetsp* by analogy of *semφ*, just as *cean* became *ceanuϑ* by analogy to *huϑ*.

cezpz, 'eight times' (F.I 387); *cezpalχals*, 'eighty' (*ibid.*). The ordinal appears in the proper names *Corsdle* (*CIE.* 2058), *Corstli* (*CIE.* 2059) (these two inscriptions in Latin letters), *Cezartle* (*CIE.* 708), *Cezarle* (*CIE.* 709), *Cezrtle* (*CIE.* 4825), *Cezrtlial* (*CIE.* 1076), *Ceristli* (*CIE.* 2036). A more primitive form is *Ceztes* (*CIE.* 710), contracted from **Cezrtes* < cets + art + os (§ 99). The other forms have the *l-suffix* seen in Latin *Quartulus* (Schultze, p. 518).

From Papias and certain Leyden glosses we learn that the Etruscan name of October was *Xofer* (Müller-Deecke, II, 307 n.). This is perhaps an attempt to write .ocsfer. If so, it corroborates to some extent the supposition of a stage .ocs in the development of the numeral.

9. *mu*

The normal form of the Etruscan word for 'nine' is difficult to determine; the root occurs only in derivatives: *muvalχls* (= .mou̯alcl̥s), 'ninety' (F. 2335*a*); *meani municl-eϑ*, 'once and ninety (years),' *meϑl-m nurφsi*, 'ten and nine times,' 'nineteen times' (both in F. 2339).

10. *mealχls*

.meəlcls, as though from *smē + dec + u̯ēs (see § 97), that is, 'one ten.' There is also a non-adjectival form *meχlum*.

(*m*)*aχs mealχls-c*, 'one and ten,' i.e., 'eleven' (F. 2340); *meχlum* (F. 2033 *bis* E. *a*); *meχl* (F.I 399); *meϑlum* (F. 2339).

The Ordinals

99. The Etruscan ordinals underwent a change whereby the *-artos* of .q̆artos, 'fourth,' was carried over to the succeeding ordinals; see *huϑ*,

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[4] [Less violent would be a series: *oct-* > *octs* > *ects* > *cets* > *cetsp*, assuming, with Dr. Hempl, the continued influence of tsecs.—F. A.]

§ 98. Latin scholars have long been acquainted with one phase of this in the Latin that prevailed in territory once Etruscan or exposed to Etruscan influence, but they failed to understand it. Thus *quinquatrus* (with metathesis of *rt* to *tr*), 'the fifth (day after the Ides),' came from Falerii to Rome with the cult of Minerva,[5] and this *quinquatrus* is obviously identical with *ciarϑe*, 'fifth' (§ 98). Varro[6] informs us that the words for 'sixth' and 'seventh' at Tusculum were *sexatrus* and *septimatrus;* and from Festus[7] we learn that *decimatrus* was the Faliscan word for 'tenth.'

[5] Müller-Deecke, II, 46 ff.

[6] *De lingua latina,* iv.14.

[7] *E cod. Farn.,* p. 257, *a,* 6 M.

VARIOUS GRAMMATICAL NOTES

Conjunctions

100. Etruscan had, besides the two conjunctions that we find as *et* and *-que* in Latin, also a third one *em* (*LS.* 30). All three have the value 'and'; all three may appear in clipped forms; and all three may be used either between the words connected or after the second—similarly after the initial word of an added clause. But *eϑ* normally stands between the words it connects, and it assumes the postpositive position only in late times.

et, 'and,' almost invariably spelled *eϑ* or, in reduced form, *ϑ*: *Ona desiem et epim,* 'at one and the same time I shall be away and shall consume' (**9**); *Lisipiϑi purenai eϑ verai* (Latin *Lesbidi purissimae et uerae*), 'to the most pure and true Lesbian' (**16**); *Seronai-ϑ Sivai,* 'of Serona and Siva' (*LS.*). From the use of *eϑ–eϑ*, *eϑ–ϑ*, in two very old inscriptions (F. 2292, 2297, and Herbig, No. 117), it would appear that *eϑ–eϑ* early meant 'as–so'; compare Old English *swa–swa,* 'as–as.'

-χue (.q̆e or .cwe); *santi ϑurial-χue, 'senti duri-que,'* **12**; *Lautneś-cle caresri Auleś,* 'of Lautinius and darling Aulus,' *CIE.* 4116; *Velϑinaś eśt-la Afunaś,* 'is (the stone cippus) of Veltina and Afuna,' **19**.2; *Ane Cae Vetus Acnai-ce,* 'Anenus Gaius (son of Vettonius) and (his wife) Acinia,' *CIE.* 1118; *ścuna cenu epl-c*[1] *felic,* 'the auspicious meal and the auspicious feast,' **19**.11; similarly, but with *-c* between the two words connected by it, *Iχ matam śuci-c firin,* 'Sacrifice the breast and uterus of a sow,' **21***a*.

Perhaps the most common Etruscan word for 'and' is *em, n, um.*[2] The earliest form appears to have been *em* and the earliest meaning 'then,' early Latin *em,* 'then.' Compare Umbrian *enem,* 'then,' Oscan *inim,* 'and,' Latin *enim,* 'for.' *rotn-em uvlin,* 'image and resting place,' **11**.2; *leśc-em,* **20**. For lack of stress *em* might be reduced to *m* = .m̥: *cemul-m lescul,* 'with food and sustenance,' **19**.7; or .m: *Tinśi Tiuri-m,* 'to Jupiter and Luna,' **21***b*. The .m̥ may also be resolved into .əm, spelled *um*: *cis-um,* 'and five,' **21***c*. The original meaning 'then' is probably intact in *m-ϑuxtiϑ*, 'then lead thou forth,' F. 2345, *EEI.* 15.

Adopted Words

101. There evidently was considerable interchange of words between Etruscans and their neighbors, in Asia Minor as well as in Italy.

Greek words in Etruscan, *asil,* **22**; *eϑrse,* **21***b*; *eule,* **18**; (*ko*)*ro, LS.* 33; *lautn,* **19**.2; *mlaχ*(*u*)*ta,* **15**; *punϑlai,* **18**; *rotn-,* **11**.2; *sotris,* genitive of *soter,* **11.4**; *śuriseis,* **20**; *teurś,* **25**; *Tiuri,* **21*b***; *Larϑiia,* **6**; *partenus,* **11**; *treten,* **11.4**; *uvlin,* **11.2**; *cupe, putere, pruχum,* **14**; *prucuna,* **21*f***; *pruχs, qutun.* Such an adopted word could, of course, enter into composition with a native Etruscan word: *ϑevsi-alϑia,* **15**.

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[1] Skutsch, *PW.*, 805.4, 13.

[2] Skutsch, *PW.*, 797.14 ff.; 805.14 ff.

Non-Javonian as well as Javonian Greek is reflected in Etruscan, sometimes in the case of one and the same word. *Semla* (.sem`lā) < Doric Σεμελα = Epic Σεμέλη; *Lala* (`lālā) < *Λαδα = Epic Λήδη, F. 2473; *Ariaϑa* (.ariad`dā) < 'Αϱιαδνᾱ, Körte in Herbig, No. 563 = *Areaϑe* (.aread`dē) < 'Αϱιάδνη, Skutsch, *PW.*, 787.59; *mamima* (.məmīma), Javonian μνῆμα, also *epana`mīna* < *ἐπαναμνῆμα, but Doric *doφmrala,* **9**; et cetera.

As will be noted, Etruscan sometimes reflects Greek forms not elsewhere recorded. Skutsch assumed (*PW.*, 787.66) that Etruscan *Menle* was from Μενελᾶος, which is quite impossible, for this would have given Etruscan Men(e)`lā(s), while the usual Javonian Μενέλεως would have produced an Etruscan Men(e)lōs. The actual Etruscan *Menele* (F. 2523), later *Menle,* is from .menelēe < .menelēos, the unrecorded prehistoric *Μενέλῃος, out of which Μενέλεως regularly arose (Thumb, p. 349). Of the Greek words that I have observed in Etruscan, the majority pertain to utensils and to matters of religion, or are names.

Various Etruscan geographical names (some of which might also appear as family names) were taken up into Greek, receiving Greek spelling and occasionally Greek phonology. This is especially likely to be the case where Etruscan territory became Greek territory. Thus Etruscan .Murinyā, later .Murin`nā (spelled *Murina* or *Morina*) appears in Greek as Μυϱειναα, or Μυϱῖνα. See also *Enaś,* **21*a***.

Though there are countless Etruscan words that are the Etruscan varieties of the Italic words that we know in Latin, I find very few traces of Etruscan words adopted from the Latin. When we know Etruscan phonology and morphology better, we shall doubtless be able to detect with more facility those Etruscan words that were early adopted from related dialects. For example, Etruscan *felic* (**19.11**) is clearly related to Latin *felix* and has the more primitive Italic inflection. Still, it would appear not to be originally Etruscan but adopted from the Latin. For the phonology of the word is Latin and not Etruscan. The genuine Etruscan word would have been **fēnīc* (§ 67). But the word must have been adopted from the Latin at an early date, before the *-s* of the masculine was assumed also by the neuter. If Etruscan had had the word that appears in Latin as *vinum,* it would (except in the very earliest texts) have had the form *vun* or *von* (.won).[3] This I have never met. But in the late text of the

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[3] See § 53. We surely should not be warranted in assuming for Etruscan the

Mummy Manuscript we frequently find *vinum* (once spelled *vinm*), which is clearly a word adopted from Latin. Though I have as yet detected few Latin words that were adopted by the Etruscans, we find many Latin names taken up into Etruscan. See Schulze, *Lateinische Eigennamen.*

On the other hand, numerous Etruscan words, as well as names, were evidently taken over into Latin; which does not surprise us, Etruscan civilization being older and more advanced than Latin. See *epl,* **19**.8; *haralio, LS*. 35; *vinuχs,* **13**; also *śupelneξ,* **17**. For Etruscan names taken over into Latin and more or less Latinized, see Schulze; for example, *Qvinte.* A very instructive case that was not understood by Schulze is found in the bilingual F. 251, *CIE*. 428; see *EI.*, No. **1**. Here *Fulni* (.fol`nī) is Latinized as *Folnius,* although there existed a real Latin counterpart, namely, *Fulvius.*

Etymology of Etruscan Names[4]

102. (1) Names in *ie, i, e: ϑeprie* (*CIE*. 2331), *ϑepri* (*CIE*. 4374), *Titi* (*CIE*. 3917), *Tite* (*CIE*. 3916), etc. These endings are stages in the development: *-ios > ie > i > e; see § 83.

(2) Names in *-unie.* Etruscan *n*-stems present no *n* in nominative and genitive: *Secu* (*CIE*. 317), *Secuś* (*CIE*. 319), *Petrual* (*CIE*. 4501); see § 72. From such *-ōn* stems were formed derivatives in *-ōn-ios > *unie* > *uni* > *une:* compare *Ταφu* (*CIE*. 492) and *Ταφuniaś* (*CIE*. 836), which implies a masculine **Ταφunie* (Schulze, *LE.*, p. 303); *Secunia* (*CIE*. 2916), *Secune* (*CIE*. 1479).

(3) This gave rise to a new suffix: *-nie, -ne,* which might appear on names *not* originally *n*-stems: *Papa, Papania* (Schulze, p. 332), *Ceisinia* = Latin *Caesennia* < *Ceisie* + *-nia* (F.I 496; Schulze, p. 135).

(4) Family names in *-ies.* When a man's son was still young, it was natural to call the father by the family name and the boy by his given name. Then, if it was necessary to identify the boy more exactly, there was joined to his given name the genitive of the name that his father was known by, that is, the family name. Thus the son of *Larϑ Θeprie* might be called *Θepries Arnϑ*, or *Arnϑ Θepries,* just as in some parts of Germany Gustaf the son of Johann Schrader is called Schrader's Gustaf instead of Gustaf Schrader.

This genitive was often regarded as a nominative (compare English *Williams, Richards,* etc.), and the genitive of the father's given name might be added to it. (Cp. Danielsson-Herbig, *IF.*, XXVI, 370):

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peculiar Latin change of .woi to .wei; and if we did, this would give us .wē, not .wī, in Etruscan.

[4] [Adapted from "The Tuscan Tung."—F. A.]

Arnϑ Leinies Larϑial clan (F. 2033 *bis* E *b,* and Skutsch, *PW.,* 796)
'Arnth Leinies, son of Larth'
Saturinies Arnϑ Larϑal (Ga. 745)
'Arnth Saturinies, (son) of Larth'
Arnϑ Xurcles Larϑals clan Ramϑas Pevtnial (F. 2070)
'Arnth Churcles, son of Larth, (born) of Ramtha Pevtni'

And this same family name in *-ies* could also stand after the genitive of the father's given name:

Larϑ Xurχles Arnϑal Xurχles Θanχvilus-c Cracial clan (F. 2071)
'Larth Churchles, son of Arnth Churchles and of Θanchvil Gracchia'

[I think it probable that here, and in many other inscriptions, the woman's name consists of her given name followed by the genitive of her father's name: 'Tancvil's Gracchia,' etc.—F. A.]

FAMILY NAMES ENDING IN (*n*)*a,* (*n*)*as*

103. In Latin the ablative or genitive of the tribal name (really an adjective agreeing with the feminine noun *tribus* or *familia* understood) was added to the personal name (Egbert, *Latin Inscriptions,* p. 96).

Exactly the same thing took place in Etruscan, but in the course of time the added name came to be regarded as the person's family name ('second name'), and thus the feminine ablative or genitive was regarded as a masculine nominative.[5] As will appear from the illustrations, it is often impossible to determine whether in a given case we have to do with a family name (in the nominative), or a tribal name (in the genitive or ablative).

The long vowel of the ending attracted the stress if there was no preceding long vowel in the name (§ 36). Since many tribal names are really town names (compare the Etruscan family name *Murina* and the town name *Morina* on the Lemnos Stone), the ending of these family names was originally adjectival: *-iā*. Before the following long vowel the .i̯ blended with the preceding consonant and (providing no consonant, diphthong, or long vowel preceded it) doubled it. Such doubling is rarely (X*artillaś,* § 98) indicated in the Etruscan spelling, but is often betrayed by the Latin form of the names; compare *Spurinna, Laucinna, Lausenna,* and the names of towns like *Myrinna* and *Ravenna.*

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[5] Compare the Lycian names in *-āsī* (spelled *-azi*) and in *-āsn̥* (spelled *-azn*):
Sppartazi, 'Spartan'
Atanazi, 'Athenian'
Vizttasppazñ = ‘Υστάσπης (originally the locative-genitive of the Persian name *Vištāspa*)
Omrggazñ = ’Αμόϱγης, etc.

The forms in *-azi* are by origin exactly such locative-genitives as *Seasi* (*LS.* 3). The forms in *-azñ* have locative *-n̥* from postpositive *-en* which lost its prepositional identity just as in Umbrian (Buck, p. 114).

Vl Remzna Crespe (*CIE.* 2679); (*Crespe* is a 'cognomen')
Seϑre Pusca Seϑres (*CIE.* 2653)
'Sethre Pusca (son) of Sethre (Pusca)'
Ar Meluta Larϑal Titial clan (*CIE.* 2927)
'Ar Meluta (son) of Larth, born of Titia'
Larϑ Melisnas (Ga. 593), which may be either 'Larth of the Melisnian family' or simply 'Larth Melisnas'
Ramϑvla Tarχnai Av sec Tarχnas (F. 2351)
'Ramϑvla Tarχnai, daughter of Av Tarχna'

Here *Tarχnas* is clearly the genitive of the masculine family name, and the father of Ramϑula Tarχnai. *Tarχnai* is the younger form of the feminine family name that largely displaced the older *Tarχnia* (F. 1787). The early pronunciation of *Tarχna* (.tarqin`nā) is shown by the Latin *Tarquenna.*

FEMININE NAMES IN -ī

104. Etruscan retained the old Indo-European ending -ī which arose in *-i-, -ia*-stems (Brugmann, II^2, § 134, and *E.,* § 14, above): *Ecnati* = Latin *Egnatia; Hasti, Fasti,* beside *Hastia, Fastia.*[6] Compare also *ati,* 'mother' (Skutsch, *PW.,* 796.21), a feminine form of the word seen in Latin *atta,* 'father.' That the -ī retained its length is shown by the spelling *Hlial* (*CIE.* 2829) beside *Helial* (*CIE.* 2839).

This feminine ending *-i* could also be added to a masculine nominative, just as the Germans add *-in* to form the feminine *Amerikan-er-in,* and as the Greeks added a masculine *-s* when an abstract in *-a* came to denote a male being: *νεανία, 'youth,' νεανίας, 'young man.' It is strange that this process, so well understood in other languages, should be regarded, when found in Etruscan, as something peculiarly un–Indo-European. (Skutsch, *PW.,* 803, 804).

In this way, masculine family names in *-u* (.ō < ōn) became feminine family names in -*ui*: *Petrui* (F. 1234), *Pumpui* (F. 687 *bis*), etc. Old *o*-stems ending in -*e* (ə) in the masculine lose the -*e* before the long -*ī*: masculine *Hele* (*CIE*. 1260), masculine genitive *Helesa* (*CIE*. 1261) < *Helesal, feminine nominative *Heli* (*CIE*. 1265). The -*ī* ending was also added to family names in -*nā*, although these were themselves originally feminines (§ 103). The -*nai* thus created later became -*nei* (§ 52) : *Θanχvil Tarnai* (F. 2327 *ter* b), *Ramϑa Viśnai* (F. 2327 *ter* a), *Larϑia Unatnei* (*CIE*. 3026). The -*n*- before the ending of the Greek name Περσεφόνεια caused it to join the Etruscan gentile names in -*ai*, -*ei*: *Φersipnai* (F. 2033 *bis* D b), *Φersipnei* (F.I 406). Compare also the nominatives: *Elinai* (F. 2500, 2511, etc.), *Elinei* (F. 44) from Greek Ἑλένᾱ.

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[6] This feminine ending in -ī must be clearly distinguished from the masculine ending in -ĭ from *-ios (§ 102).

THE LEMNOS STONE[1]

The best account of this Etruscan inscription, discovered many years ago on the island of Lemnos by Cousin and Durrbach, is the painstaking study of Nachmannson.[2]

FACE OF STONE

$\underset{1}{\textit{Holaies}}$ $\underset{2}{\textit{naφoϑs}}$ $\underset{3}{\textit{Seasi}}$

$\underset{4}{\textit{maras}}$ $\underset{5}{\textit{mav}}$ $\underset{6}{\textit{śialχveis}}$ $\underset{7}{\textit{avis}}$ $\underset{8}{\textit{eviśϑo}}$

$\underset{9}{\textit{Seronai}}$-$\underset{10}{\textit{ϑ}}$ $\underset{11}{\textit{Sivai;}}$

$\underset{12}{\textit{aker}}$ $\underset{13}{\textit{Tavarsio,}}$

$\underset{14}{\textit{vanal}}$ $\underset{15}{\textit{aśial}}$ $\underset{16}{\textit{Seronai}}$ $\underset{17}{\textit{Morinail.}}$

SIDE OF STONE

$\underset{18}{\textit{Holaiesi}}$ $\underset{19}{\textit{φoki}}$ $\underset{20}{\textit{aśiale}}$ $\underset{21}{\textit{Seronai}}$-$\underset{22}{\textit{ϑ}}$

$\underset{23}{\textit{eviśϑo}}$ $\underset{24}{\textit{to}}$ $\underset{25}{\textit{Veronai}}$ $\underset{26}{\textit{Sivai}}$ $\underset{27}{\textit{avis}}$ $\underset{28}{\textit{śialχvis;}}$

$\underset{29}{\textit{maras}}$-$\underset{30}{\textit{m}}$ $\underset{31}{\textit{avis}}$ $\underset{32}{\textit{aomai}}$

$\underset{33}{\textit{(ko)ro}}$-$\underset{34}{\textit{m}}$ $\underset{35}{\textit{haralio}}$ $\underset{36}{\textit{Sivai;}}$

$\underset{37}{\textit{eptesio}}$ $\underset{38}{\textit{arai}}$ $\underset{39}{\textit{tis}}$ $\underset{40}{\textit{φoke.}}$

'[Son] of Hodaeus, grandson of Seja;
maras and also for sixty years assistant priest
of Serona and Siva;
Taurius the keen,
servant of the wise Serona at Murinna.'

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[1] [Only one line of the inscription was interpreted in "Venetic and Etruscan," and this appeared just before the Capuan Vase (*infra*). The version printed here is taken (with a few omissions) from an unfinished book entitled "Etruscan Sister of Latin." I have given it first place because of its length and because it seems to me the best possible introduction to other interpretations.—F. A.]

[2] "Die vorgriechische Inschrift von Lemnos," *Athenische Mittheilungen,* XXXIII, 47–64; see also Skutsch, *P.W.,* 782.31 ff.

'[Son] of Hodaeus (the haruspex of the wise Serona) and
assistant priest of Siva at Verona for sixty years,
also for as many years maras
and assistant haruspex of Siva;
for two years altar priest and haruspex.'

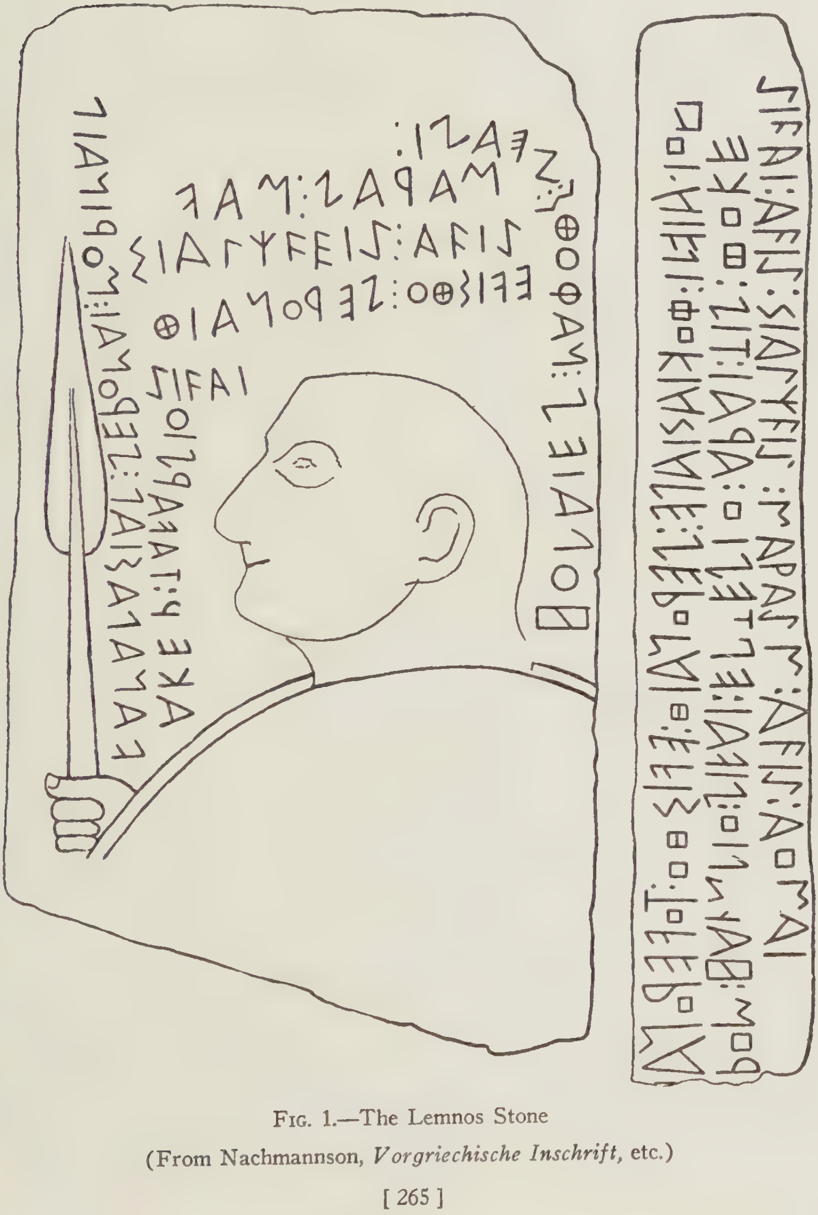

Fig. 1.—The Lemnos Stone

(From Nachmannson, *Vorgriechische Inschrift*, etc.)

The stone is a slab cut from a yellowish porous rock and is 94×52 centimeters in size and 14 centimeters thick. It was originally rectangular, but has suffered some mutilation and the bottom is broken off obliquely. On the face of the slab is the bust of a man, cut in archaic flat relief. As he is represented as holding a spear in front of him, he is usually miscalled a warrior. There is an inscription on this side and one on the right edge, or narrow side, of the slab.

The inscription on the face of the stone consists of three groups. It is generally regarded as beginning at the right, passing to the top, and then ending at the left; and this is the order in which I have given the text. It is quite possible, however, that the two lines at the left, giving the name of the priest and stating his position at Murinna, were cut first; that the boustrophedon statement of the positions he held at Verona was then inscribed above; and that the statement as to his ancestry was added last, in the line at the right. The fact that this line ends abruptly, above the lines telling what offices Taurius held during his earlier life, would seem, as pointed out by Pauli, to indicate that this was the last line cut. But it is probably impossible to determine this, and not a matter of any importance.

The inscription on the right narrow side is generally supposed to begin with the line at the left (*Holaiesi,* etc.) to continue with the middle line (*rom,* etc.), and to end with the left line. This would produce the most remarkable sort of zigzag writing. Moreover, the sense demands that the middle line be taken as the last. And the explanation of this arrangement is not far to seek. The stonecutter started at the top, passing from right to left, with the tops of the letters running along the edge of the stone. We should have expected him then to begin his second line at the left, just below the first line and with the tops of the letters running along the feet of those of the first line—as the mason did who cut the four top lines on the face of the stone. But having found it easy to keep a straight line by cutting the letters along the top edge, he evidently preferred to continue to do so by running the second line along the opposite edge and leaving the intervening space for the remainder of the inscription. It will be observed that, in doing this, he cut the second line just as he would have done if he had cut it under the first, that is, from left to right, and that he consistently cut the third line from right to left. The breaking off of the foot of the stone has caused the loss of two or three letters.

It is evident that the two inscriptions are the work of two different hands; compare especially the round form of o, ϑ, φ in the one, and the square form in the other. The dialects are evidently not absolutely identical; compare *Holaies/Holaiesi, aśi-al/aśi-ale, sialχveis/sialχis.* But the alphabet employed is the same, and it is employed in the same way in the two texts.

Since Kirchhoff's day,[3] it is customary to speak of the script employed on the Lemnos Stone as the same as that found on the Old-Phrygian tombs.[4] That this is far from true I shall show in my study of the latter inscriptions. For the present I may say that the script on the Lemnos Stone, like other Etruscan scripts, neglected the letters β, γ, δ, and used Ψ with the Western value of a velar stop; while the Phrygian script neglected the letters ϑ, φ, χ (except that it employed φ to spell .h̤[5] in *kφi,* 'and,' Latin *que*), and used Ψ with its Eastern value .ps, as in δαψιτ = Greek (ἔ)ϑαψε. In fact, it is not at all certain that Lemnian and Phrygian ᛊ is a form of **I** = *z.* I regard as the best evidence in favor of the theory the fact that in Lycian the nominatives (earlier locative-genitives, *E.*, 76) ending in *-ās-ī* and *-ās-n̥* are written with **I**: *Sppart-az-i,* 'Spartan'; *Vizttaspp-az-ñ* (Persian *Vistāspa* = Ὑστάσπης).[6] But it is quite possible, and I think not improbable, that ʃ is from ᛊ *s,* exactly as in the second Praesos inscription (*EI.*, 9) ʃ *i* is from ᛊ = *i.* In that case, we should have to recognize Lemnian and Phrygian Σ *s* as one and the same as Southern Etruscan and Southern Venetic *ś* (M), the relation of the forms being the same as that seen in Greek Σ and Phoenician **W**, in each case the last sibilant in the alphabet.

In transliterating, I follow the usage of other Etruscologists. That is, the letters are in general reproduced in Roman italics, but ϑ, φ, χ are employed for the corresponding Etruscan characters. In one particular only have I deviated: ʃ and Σ are historically *z* and *s*; but as they consistently have on the Lemnos Stone the values *s* and *ś,* I transcribe them *s* and *ś,* respectively. To transcribe them *z* and *s* would make all the words in this text that contain one of these letters appear to be at variance with the same or similar word in all other Etruscan texts. My practice in this matter is in harmony with the universal custom of transcribing Oscan **D** and **R** as *r* and *d*, respectively, and with the general practice of transcribing ancient **F** as *v.*

I know no external data that could fix the time of our inscriptions. But the text is certainly one of the most archaic Etruscan texts that we possess. While the loss of final *-s* after a short vowel (*E.*, 62) and the beginning of the change of a preceding *-o* to *-e* (*E.*, 83) are features that might naturally be regarded as indicative of a text younger than those that retain *-os* intact, the primitive form of the locative-genitives ending in postpositive *-(a)l* (*aśī-al, Morinai-l*) constitutes a feature of the language that would seem to be particularly significant of age. With such knowledge as we now possess, I am inclined to date our stone somewhere about 600 B.C., which agrees well with what others have held.

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[3] Kirchhoff, *Studien,* p. 54.

[4] Ramsay, *Journal of the Royal Asiatic Society,* N.S., XV, 100–135. Hirt, *Die Indogermanen,* II, 594 ff.

[5] Greek φ was used to spell the same sound in Runic (Maglekilde Charm, Stephens, O-N. R. M., 1/864, Handbook, p. 103), usually simplified from Φ to ʃ (as ⊟ became **H**), with shift of value to χ, as .h̤ often became χ (.h). The earlier form of the rune (Φ Φ) is reflected also in Gothic Θ = .h̤.

[6] Deecke, *Bezzenbergers Beiträge,* XIII, 137. Kretschmer, *Einleitung,* p. 312.

It may not be out of place to explain that there is nothing strange in the finding of Etruscan texts on the island of Lemnos. From Egyptian, Greek, and Roman writers, we learn[7] that a people, whose name appears variously as *Turša, Tursenoi, Tyrrhenoi, Tu(r)sci,* and *Etrusci,* dwelt on the islands of the Aegean Sea,[8] on the west coast of Asia Minor,[9] and in Italy. The first we hear of them is the Egyptian account of their coming, in the fourteenth and thirteenth centuries, from their islands in the north, on raids against Egypt. The last word of their presence in the east is Herodotus' account (VI, 140) of their being driven out of Lemnos by the Athenians, toward the close of the fifth century. We shall see that they once lived in Crete (*EI.,* **9**), as well as in Egypt (*EI.,* **21**).

The fact that the local priest in Lemnos had come from Verona does not necessarily imply that the Lemnos cult was an offshoot of that at Verona and that the Etruscan community in Lemnos had come from Italy. It simply indicates that Verona was, at the time, a great center of the worship of Serona and Siva, and supplied priests for provincial communities.

This is not the place for me to consider in detail the early movements of Italic peoples. I may say in brief, however, that I am convinced that the Etruscans of Lemnos belonged to the old Pelasgian population that once overspread a large part of the eastern Mediterranean coasts. By Pelasgian I understand the *Q*-branch of what we call the Italic peoples. This branch passed from its old home in central Europe southeast, through the Balkan Peninsula, and on to western Asia Minor and the islands of the Aegean Sea, as many other Aryans did. Long after, as Veneti, Trojans, and Etruscans, they left Paphlagonia, Troas, and Lydia, and, making their ways, in part to the head of the Adriatic, in part around to Etruria and Latium on the western coast, came again to be neighbors of their ancient kin, the *P*-branch of the common stock who had entered Italy directly from central Europe or across the headwaters of the Adriatic, and to whom they brought the higher civilization acquired in the east. All this is in perfect harmony with Hirt's keen observation[10] that the great difference between Oscan-Umbrian and Latin implies a long separation of these two branches of Italic stock.[11]

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[7] Körte, "Etrusker," *PW.,* 730 ff.

[8] Samothrace, Imbros, Lemnos, and Lesbos, as also the peninsula of Athos.

[9] Lydia and Termera (near Halicarnassus).

[10] Hirt, *Die Indogermanen,* II, 611 (158.1).

That the text on the Lemnos Stone is Etruscan or a closely related form of speech is now almost universally believed. Still, some of the reasons advanced for this belief turn out not to be sound. Of the eleven words on the stone which Pauli[12] undertook to identify with words found in Italian Etruscan texts, only three *arai* (*aras*), *avis* (*avil*), and *maras* (*maru*), have any relation at all to the words compared. Nevertheless, the theory is correct, as is abundantly shown in the course of this study. It has been proposed that we use "Tyrrhenian" as a general term, to include the Etruscan of Italy, the speech found on the Lemnos Stone, and other related dialects, and that we restrict the word "Etruscan" to the dialect found in Italy. There is, to my mind, no strong reason for this and, still, no particular objection to it. For the present, however, until we know something definite about the dialectic relations of the various forms of Etruscan speech, it would seem wise to retain the term "Etruscan" for all, and to distinguish the speech of Lemnos as Lemnian Etruscan, that of Cyprus as Cyprian Etruscan, that in the Mummy Manuscript as Egyptian Etruscan, etc. We must also look to see Italian Etruscan break up into various dialects,[13] and it would not be surprising if, in the course of time, special relations were discovered between one or another of these and one or more of the forms of Etruscan found outside of Italy.

Face of the Stone

Holaies naφoϑś Seasi

.Hoˋlai̯ēs nəˋpōtś Sēāsī

'[Son] of Hodaeus, grandson of Seja'

(1) *Holaies,* .Hoˋlai̯ēs, genitive of .Hoˋlai̯e or .Hoˋlaio < .Hoˋlaios, early Etruscan form of Ὁδαῖος, 'Hodaeus.' ὁδαῖος, 'by the wayside' = ἐνόδιος, which was also an epithet of some gods that had their statues by the wayside. As the name of the priest of Siva-Apollo (*infra*), it is probably parallel to Ἀυιεύς = Apollo. While .Holaio(s) is a *io*-stem, the genitive has the ending *-eis, -ēs,* taken over from *i*-stems, just as in Oscan and Umbrian. The earliest Etruscan texts still have the old diphthong *ei,* as in Oscan and Old Latin; but this early changed to *ē,* as in Umbrian. See

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[11] [See also "Excursus IV" below.]

[12] Pauli, *AIF.,* II, 30.

[13] This is already observable, for example, in the inscriptions from Toscanella, published by Torp, *NEI.,* pp. 508 ff.

E., 53. The change of medial *-d-* to *-l-* (found also in Sabine) is one of the most primitive characteristics of Etruscan. For *-ai̯-*, see *E.*, 52. For the nominative in *-e* < *-o* < *-os,* see *E.*, 83. For the stress, see *E.*, 36. Compare *Holaiesi* (18).

(2) *naφoϑś,* .napōts or .nəˋpōts, the Etruscan mate of Latin *nepos,* 'grandson.' The weakening of *e* to ə (spelled *a*) betrays the lack of stress; *E.*, 38. For the use of φ, ϑ, χ as equivalents of *p, t, c,* see *E.*, 20 ff. For *-ś,* see above. My study of the photograph and the squeeze, as well as what Nachmannson admits[14] convinces me that the word ends in ≶ *ś,* though the stone is somewhat mutilated here.

(3) *Seasi,* ˋSēāsī, genitive of .Sēā, Latin *Seia,* 'the goddess of sowing.' ē < .ei̯. The name, being an *a*-stem, has the early genitive ending *-ās* (as in *pater familias*), but also *-ī,* the genitive ending belonging properly to *o*-stems; see *E.*, 76, and compare *Holaies-i* (18). For the stress see *E.*, 36. After the initial *S-*, Nachmannson and others read *i,* but a careful examination of the photograph and the squeeze makes it clear that we have *e.* The failure to recognize this was due to the fact that the upper half of the letter has suffered mutilation. An oval flake has removed the top of the letter, nearly to the middle of the upright staff. But the ends of the two upper oblique branches are clearly visible, as also the whole of the lowest one. The only thing peculiar about this *e* is that it has the three oblique branches closer together than the other *e*'s, and thus higher up. The word has the appearance of having been accidentally omitted and then inserted above the line, which may have been done by another hand. It will be observed that *Holaies naφoϑ* would make good sense, and that this could have caused the stonecutter to omit the second genitive.

maras mav śialχveis avis eviśϑo

.maˋrās mau̯ ˋśīalcu̯īs au̯īs ˋēu̯isto

'*maras* and also for sixty years assistant priest'

(4) *maras* (also 29 below), .marˋrās, 'maras,' a title of office or dignity, doubtless of the same origin as the title that usually appears in Etruscan as *maru,* .maˋrō = Umbrian *maro(n)-* in *maronatei, maronato,* respectively locative and ablative of the word for 'office of *maro*.' In *maras* we have an *ā*-stem, in *maru* an *n*-stem. Thus, Etruscan .marās : Etruscan (and Umbrian) .marō :: Oscan *Marās* : Latin *Maro* :: Etruscan *Aχui(l)āś* : Latin *Aquilo.* It is, of course, not necessary to assume that the .marās or .marō had the same character and importance in all Italic com-

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[14] Nachmannson, *op. cit.*, 55–56.

munities. He may have been a real official in one community and only a titled personage in another. Compare the history of our word *marshal.*

Torp[15] has shown that the *maro* held a certain relation to a god, such as warrants us in inferring that he had a priestly function. In one of the inscriptions from Toscanella[16] we find *maru paχaϑuras caϑsc,* which Torp renders *'maru* des *Pachathura* und des Catha,' explaining *Pachathura* as 'Pacha-spross' or 'Sohn des Pacha,' and referring to Pauli's explanation of *ϑura* as 'Sprössling' or 'scion.' The nominative singular *φacutura* (*CIE.* 2318), the genitive singular *Paχaϑuras,* the genitive plural *Precuϑuraśi* (*CIE.* 4116), as well as the nominative singular *ϑura* (F. 2033 *bis* D. c.), are *ā*-stems, to be considered in connection with such consonant stems as *Velϑur* (< *Vel*), genitive *Velϑurs, arnϑur* (< *arnϑ*), genitive *Arnϑurus,* and *Numitor* (< *numa*), *Numitorius,* etc.[17] These all represent extensions of the Aryan use of *-ter-, -tēr, -tor-, -tōr,* in names of relationship. Schulze[18] regards the *-ϑur* as originally a separate word that entered into composition with *Vel,* etc. Instead, *-ϑur* (.-tōr) is the Aryan ending seen in words denoting relationship, *-ϑura* (.-tōrā) is an *ā*-extension of this ending, and the independent word *ϑura* (.tōrā) was abstracted from words of relationship ending in *-ϑura* and carried with it the meaning 'blood relation,' 'brother.' In exactly the same way we have derived from such words as Catholicism, Protestantism, Presbyterianism, etc., the word *ism,* 'a doctrine or system,' and in the same way the playful *ology,* 'branch of learning,' was abstracted from words like *theology, philology, geology,* et cetera.

Torp associated *maru Paχaϑuras* with *marunuχ Paχanati* (F. 2335 *b*), but he did not recognize that *Paχa-nati* was a genitive too, and exactly equal to the genitive *Paχa-ϑuras.* Considering that he recognized *Paχaϑuras* as 'of *Paχa*'s son,' it is remarkable that he did not realize that *Paχanati* also was 'of *Paχa*'s son.' There evidently were two considerations that prevented: in the first place, the general tendency to assume that every Etruscan word ending in *-ti, -ϑi,* or *-ϑ* must be a locative; secondly, the unwillingness of a Negativist to recognize Etruscan *nati* as the same as Latin *nati.* Torp also failed to realize that *Paχa-* spelled *Baccha-,* Old-Latin *Baca.* In fact, Latin *bacchator* is identical in form though not exactly in value with the Etruscan *Paχaϑur-,* .bacātōr, of which *Paχaϑura* is an *ā*-extension. Torp does not mention the fact that Schaefer[19] conclusively proved that *ϑura* means 'brother.' This, however, does not disprove the value 'scion' or 'son' in *Paχaϑura*. The real meaning was 'kin,' 'relative,' out of which the two specialized meanings 'son' and 'brother' naturally grew. Compare Sanskrit *jñātíḥ,* 'kinsman,' Latin *(g)natus,* 'son,' Greek γνωτός, 'kinsman,' 'brother.'[20]

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[15] Torp, *LI.,* pp. 40–42.

[16] *T&H.,* No. 47.

[17] Brugmann, 2 (1) 1/332 ff.

[18] Schulze, *LE.,* 200. [See also Skutsch, *PW.,* 796.]

[19] Schaefer, *AIS.,* II, 128 ff.

We thus see that a *maras* or *maro* functioned in the Dionysus-Bacchus cult of Serona and Siva. Now, the Greek form of *marō,* namely μάρων, appears as the name of a strong wine and also as Μάρων, variously reported to be the son of one or another god of wine (Dionysos or Euanthes or Oinopion or Silenos), also as the teacher of Dionysos. In the Odyssey we are told of Maron, son of Euanthes, the priest of Apollo, the god that watched over Ismarus, and of the dark wine and sweet that Maron gave Odysseus. From all this we may infer that the *maro* or *maras* was a priest or official who primarily belonged to the cult of the god of wine. The word *maro(n)* is evidently connected with Maroneia, the name of the famous sanctuary of Dionysos in Thrace, as also with *Ismaros,* the name of a town near *Maroneia* and of various individuals associated with the cult.

(5) *mav,* .mau̯, 'and also.' This word is made up of *m,* 'and' (*E.,* 100), and *av,* .au̯, 'also'; see *aomai* (32). Pauli changed this *mav* into *maviz* (*mavis*) to accord with the *m aviz* (*m avis*) of the inscription on the side of the stone. But Nachmannson says, "Danach [that is, after *mav*] ist die Fläche völlig unbeschädigt. Der Raum (es ist Platz für noch drei Buchstaben da) ist unbenutzt gelassen, weil Wortbrechung vermieden wird." And Meister[21] justly commented, "Solche Änderungen wie von μαραζ: μαϝ in μαραζ μαϝ(ις) haben nicht einen Schimmer von Berechtigung; solche im Dunkeln tappende an nicht verstandenen Texten geübte Kritik ist alles Andere als methodisch."

(6) *śialχveis,* ˋ.śīalcu̯ēs = (28) *śialχvis,* .sīalcu̯īs, 'sixty.' The earlier form of the word was ˋ.śālcu̯ēs, which became ˋ.śīalcu̯ēs by analogy to the preceding .cīalcu̯ēs, 'fifty.' See *E.,* 97, 98. The earlier .śalcu̯ēs is from *.śā-dec-u̯ēs. .śā, 'six,' is from **Zecsa,* .tsec-sā < .csecˋsā, originally a feminine abstract like οἰνή, 'the number one,' or 'the ace' on dice (*E.,* 98).

(7) *avis* (also 27, 31), .aˋu̯īs, 'years' < .ai̯u̯īs < .ai̯u̯ins, an accusative plural = Gothic *aiwins,* 'times,' the accusative plural of *aiws,* 'time'; compare Latin *aeu̯um,* 'age,' 'lifetime,' 'eternity.' The teleterosis of *ai̯–i* to *a–i* corresponds to that of *au̯–u* to *a–u* in Latin *Agustus* for *Augustus,* etc.[22] See also *avilś,* **21***b*.

(8) *eviśϑo* (see 23), ˋ.ēu̯isto < .ē-u̯isces-to-s, 'disemboweler,' 'assistant priest'; compare Latin *ēu̯iscero* < .ē-u̯isces-ō, 'disembowel.' *ē-* < *ecs-*.

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[20] [Compare also Hesychius (I, 20), Ἀγαλήτορα· παῖδα Τυρρηνοί.—F. A.]

[21] *Berliner Philologische Wochenschrift,* 1886, p. 1349.

[22] Sommer, H^2, p. 110.

Compare *eptesio* (37). The disemboweler was an assistant priest who prepared the victim for the inspection of the haruspex. See *haralio* (35).

Seronai-ϑ Sivai

ˋ.sērōnai-t siˋu̯ai̯

'of Serona and Siva'

(9) *Seronai* (16, 21), .Seronai, genitive of .Serona,[23] initial form of .su̯errōnnā < .su̯er(e)sōni̯a,[24] the goddess Serona and her city Verona. The intervocalic form of the name appears in *to Veronai*, .tə U̯erōnai̯, 'at Verona' (24–25), which see. We have here to do with the phonological law: initial *su̯* > *s*, intervocalic *su̯* > *u̯*, the law underlying the appearance of initial *s*- and medial -*f*-/ -*b*- in Old Irish.[25] That the intervocalic form *Verona* prevailed in the name of the town is natural, for place names occur most frequently in locative forms, like *to Verona* in our text. Compare the generalization of the complete locative form in 'Αθῆναι, 'Athens,' as distinguished from 'Αθήνη, 'Athene.'[26] In cases like the Aquitanian *Vesunna* the intervocalic form persisted both as the name of the town and as the name of the goddess.

The name .serōnā < .su̯er-es-ōn-i̯a is cognate with Oscan *sverrunei*, .su̯errōnei̯ (locative-dative), 'spokesman,' having the root *suer- / sur-*, 'speak' or 'whisper,' seen in English *swear*, 'declare solemnly,' answer, 'talk back,' Latin *susurrus* < .su-sur-esos, 'whisper.' As the name of the goddess, it doubtless meant originally 'voice,' that is, 'the divine voice' or 'oracle.'

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[23] *Seronai* might spell .sērōnai or the earlier .serrōnia. As it does not seem likely that -*err*- would become -*ēr*- (which we later find in Latin) if the *Vērōna* stress were on the following syllable, I venture to assume that -*err*- became -*ēr*- before the time of Etruscan shift of stress.

[24] See "Excursus I," page 93.

[25] Brugmann, *Gr.*², I, 329.

[26] Similarly Θήβη or Θῆβαι, 'Thebes,' *Cumae, Faesulae*, etc. Compare also *Soracte*. In much the same way, although we still write the nominative form *Edinburgh*, we pronounce the locative-dative *Edinborough*, while in hosts of such names we also write it: *Peterborough, Scarborough*, etc. Compare *Attleboro*, etc., also the old locative-datives of *shade* and *mead*, namely, *shadow* and *meadow*, which have become independent words. That locatives like 'Αθῆναι and Cumae came to be regarded and declined as plurals was not strange. We, too, now think of such genitive adverbs as *mornings* and *evenings* (for example, "He doesn't come over evenings any more") as plurals, though they are cognate with the German adverbs *morgens*, 'in the morning,' *abends*, 'in the evening,' etc., which are historically genitive singulars.

In .su̯er-es-ōn-ā > .su̯ersōnā and .tau̯r-es-i̯os > .tau̯ərsi̯o (**13** below), we find a difference in the treatment of *-res-*. This matter has received extended consideration at the hands of von Planta (I, 486 ff.).[27] From a purely Etruscan point of view, we should expect .su̯ereˋsōnā to become .su̯erˋsōnā before ˋ·tau̯resi̯os suffered similar change. This would imply the earlier assimilation in the former, which is exactly what is reflected in our .su̯e(r)ˋrōnai and ˋ·tau̯ərsi̯o.

(10) -ϑ, .t, enclitic form of *eϑ* (*E.*, 100), .et, 'and' = Latin, etc., *et*, 'and.' This conjunction is very common in Etruscan. It is usually written *eϑ* or ϑ, rarely *et*. The unwillingness to recognize this familiar conjunction has led Negativists into strange plights; see *E.*, 18.

(11) *Sivai* (also 26, 36), .siˋu̯ai̯, genitive of .siˋuā, 'the god Siva,' a masculine *ā*-stem. By origin it is an *o*-stem, being from the Sanskrit *Śiva*, that is, *Mahādeva*, 'the great god.' The genitive *Zivaś* occurs in the Mummy Manuscript. (For a discussion of the worship of *Siva* in the West, see "Excursus II," pp. 96–98.)

aker Tavarsio

.ācer Tau̯arsio

'Taurius the keen'

(12) *aker*, ˋ·ācer = Latin *acer*, 'sharp,' 'keen,' 'shrewd.' Probably an *o*-stem, Latin *acer, acra, acrum*, Greek ἄκϱος. *-ros > -er*. I am not certain whether the word is here a common adjective or a cognomen. Compare *aśi*, 15.

(13) *Tavarsio*, ˋ·Tau̯ərsi̯o < .tau̯resi̯os, whence also Greek Ταύϱεσιος and Latin *Taurius*. It is not unlikely that Hodaeus gave his son the name *Taurius* in anticipation of his becoming a priest of Siva.

vanal aśial Seronai Morinail

.u̯anal aśī-al Sērōnai Muriˋnai̯-l

'servant of the wise Serona at Murinna'

(14) *vanal*, .u̯anal or .uanəl < .u̯aməl < .dhaməlos = Old-Latin *famul*, Oscan *famel*, 'servant'; here in the sense of 'priest who serves his god.' dh–l > u–l, u̯–m > u̯–n, -los > əl, *E.*, 83. *vanal* is a doublet of *fanurus*, Latin *famulus*.

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[27] I see no reason why Planta should hesitate (II, 492) to derive Latin *parra* and Oscan *sverr-unei* from .paresā and .su̯eresōnei.

(15) *aś`i-al,* .a`sī-al = (20) *aśi-ale,* .a`sī-ale < .asti-ad(i), genitive of .aśo < .astos, Old-Latin *astos,*[28] 'shrewd' < .ad-statos, participle of *assisto/adsisto* or of *asto/adsto* in the sense of 'set at,' with the older transitive use of *sto.* Compare Latin *astutus,* 'shrewd' < .astitūtus < .ad-stitūtos, participle of *astituo/ad-stituo,* also Greek ἐπιστήμων and German *anstellig.* (See Stowasser, Walde^2, p. 867.) *aśi-al* here limits the feminine genitive noun *Seronai,* an illustration of the fact that Etruscan early employed in the feminine genitive of the adjective the *-ī* of the masculine and neuter; see *E., 76.*

(16) *Seronai,* see 9.

(17) *Morinail,* .murin`nai̯l, 'at Murinna,' locative of .Murin`nā or `.Murinni̯a, *E., 77.* Observe the loss of *-a-* after the diphthong *-ai-* in *Morinail* but not after the long vowel *-ī-* in *aśial* above. There is a family name *Murina* (.Murin`nā) in Italian Etruscan.

SIDE OF THE STONE

Holaiesi φoki aśiale Seronai-ϑ

.Ho`lai̯ēsī po`cī a`śīale `Sērōnai̯-t

'(Son) of Hodaeus, the Haruspex of the wise Serona, and'

(18) *Holaiesi,* .Holai̯ēsī, 'of Hodaeus' = *Holaies* (1). *Holaiēs* has the ending belonging properly to *i*-stems; *Holaies-i* has also the ending belonging properly to *o*-stems and *io*-stems. Compare also *Seas-i.*

(19) *φoki,* .poci, genitive of *φoke* (40) = .poce, which see.

(20) *Aśiale,* .aśīale = *aśial* (15).

(21) *Seronai,* see 9.

(22) ϑ, see 10.

eviśϑo to Veronai Sivai avis śialχvis

`.ēu̯iśto tǭ `U̯ērōnai Si`u̯ai̯ a`u̯īs `śīalcu̯īs

'assistant priest of Siva at Verona for sixty years'

(23) *eviśϑo,* .ēu̯iśto, 'disemboweler,' 'assistant priest'; see 8.

(24) *to,* .tǭ, 'at,' the weak form of .tā, 'there,' hence the change of .ā to .ǭ, *E.,* 41. This demonstrative .tā/tǭ is found in Umbrian as a postpositive preposition spelled *-ta* and *-tu* in the native script, by which is revealed the fact that the vowel was .ǫ,[29] but spelled *-to* in Latin script, from which we learn that the consonant was .t, not .d, a fact which the

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[28] Implied in *asta lingua,* Att. apud Non. I, 54.

[29] Buck, *O-U. G.,* § 34.

ambiguous *t* of Umbrian and Etruscan does not betray. How the Umbrian value 'from' developed out of the neighboring ablative is explained by Brugmann.[30] This preposition is not identical with, but of parallel origin with our *to,* Old-English *to,* 'to,' 'at,' 'from,' Avestan *-da,* and Greek δή.[31] Etruscan *to* : English *to* :: Latin *tum* : Latin *dum.*[32]

(25) *Veronai,* ˋ.u̯ērōnai̯, locative (*E.,* 76) of *Verona,* see 9.

(26) *Sivai,* see 11.

(27) *avis,* .au̯īs, see 7.

(28) *śialχvis,* .śīalcu̯īs, see 6.

maras m avis aomai
.maˋrās m aˋu̯īs ˋau̯mai
'*maras* also for as many years'

(29) *maras,* .maˋrās, see 4.

(30, 34) *m,* .m, 'and,' see 5.

This conjunction (see *E.,* 100, above) in our text is used co-ordinately, like Latin *et* .... *et,* though not in such a way as to demand translation by 'both .... and.' Compare also *m–av* (5), 'and also.'

(31) *avis,* .aˋu̯īs, see 7.

(32) *aomai,* ˋ.au̯mai̯, 'as many,' 'the same (number of).' .au̯mai̯ is in form the nominative feminine plural of a compound, or, rather, a conglomerate, consisting of *au̯* + (*s*)*mos,* but it here has the function of an accusative (*E.,* 80), agreeing with *avis.* The first part *au-* is identical with the αὐ of Greek αὐτός, 'same'; the second part -(*s*)*mos* (compare Greek (σ)μία, 'one') is the weak grade, or a reduced form of *somos, Sanskrit *samáḥ,* Greek ὁμός, 'one and the same,' Gothic *sama,* 'same,' English *same.* *au̯* was originally a demonstrative meaning 'there' (cp. αὖ-ϑι, 'there,'[33] 'then,' 'so.' Out of this grew the meanings 'in the same way,' 'the same,' and 'also';[34] compare *m–av,* .mau, 'and also' (5). Out of the co-ordinate use of αὐ .... αὐ, 'there .... there' = *hūc et hūc,* 'hither and thither,' 'back and forth,' 'hin und wieder,' arose the meanings 'back' and 'again' (cp. αὖϑις, 'back,' 'back again,' 'again').

The spelling *ao* for .au is in harmony with the use of *o* to spell .u.

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[30] Brugmann, *Demonstrativpronomina,* p. 23 n., and p. 143.

[31] *Ibid.,* p. 61.

[32] [Compare also Indo-European *-tos seen in Indic *itáḥ,* 'thence,' Attic ἐκτός, Latin *funditus, intus,* etc. Brugmann, *Grundriss*^{2}, Vol. II, Pt. 2, p. 730.—F. A.]

[33] αὖ-ϑι is not a reduced form of αὐτό-ϑι.

[34] The English word *also* originally meant 'exactly so.'

(ko)ro-m haralio Sivai
ˋ.coro-m ˋharalio Siˋu̯ai̯
'and assistant haruspex of Siva'

(33) *(ko)ro,* .coro < (*E.*, 61) Greek κόϱος in ζα-κόϱος, 'custodian of a temple' (literally 'temple broom,' 'temple-sweeper'), figurative use of κόϱος, 'broom'[35] (κοϱέω, 'sweep,' 'clean'), but doubtless more or less confused with κόϱος, 'boy,' 'assistant.' See *haralio,* below.

(34) *m,* see 5.

(35) *haralio,* ˙.harallі̯o < *̣ghr̥radi̯os, 'pertaining to the intestines,' 'pertaining to the inspection of the intestines by the haruspex'; compare Faliscan *haracna,* 'haruspex,' Sanskrit *hirā,* 'vein, *hírah̥,* 'band,' 'girdle,' Lithuanian *žárna,* 'guts'; also Greek χοϱδή χολάδες, 'guts,' Latin *hīra,* 'empty gut,' and many other cognates. Latin *hariolus* (*fariolus, ariolus*), 'haruspex,' usually 'soothsayer,' is evidently an adaptation of Etruscan *haralio(s)* to the form of native Latin words like *sacrificiolus,* 'sacrificial priest,' *librariolus,* 'scribe,' *filiolus,* etc. Moreover, Thulin was very near the truth when he suggested[36] that Latin *haruspex* was some foreign word remodeled under the influence of words like *auspex.* In our text, *haralio* is an adjective meaning 'pertaining to the inspection of the intestines' or 'pertaining to the haruspex,' so that *koro haralio* signifies 'the haruspex's assistant.' In the same way, the adopted *haralio(s)* could be used as an adjective or attributive noun in Latin, for example, *haralios auspex,*[37] just as *sacrificiolus* and *sacrificulus* were used in *rex sacrificulus, sacrificulus vates,* etc. But *haralios auspex* was almost sure to contract to *̣harauspex, *al* and the assonant *au* coinciding and causing haplology (*E.*, 35). And this .harauspex could readily become **haruspex* by teleterosis of *a–au* to *a–u,* exactly as *au–u* tended to become *a–u,* and it is not strange that *haruspex* sometimes became *harispex* under the influence of the synonymous *extispex.* Everybody knows that the *haruspices* were Etruscans and that they first advised the emissaries of the Roman state who had come to Etruria to consult them, but later took up residence in Rome, bringing their arts with them.

Our *koro haralio* is practically synonymous with *evisϑo.*

(36) *Siva,* see 11.

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[35] Compare German *Besen,* 'broom,' 'servant girl,' 'slattern,' 'girl'; English *besom,* 'broom,' 'slattern'; French *balai,* 'broom,' 'policeman.'

[36] Thulin, *B.Ph.W.* (1907), p. 527.

[37] It must be remembered that, while *auspex* originally meant a diviner or augur who observed the flight or other actions of birds, it early became generalized and was used to designate any diviner.

eptesio arai tis φoke
ˋ.ēptessi̯o ˋārai̯ dis ˋpoce
'for two years altar priest (and) haruspex'

(37) *eptesio,* .ēptessi̯o < *̣ecs-pet-iss-i̯o-s, 'one who prays urgently or customarily,' 'prayer priest.' Compare Latin *peto,* 'light upon,' 'try to get,' 'demand,' 'beg for,' 'seek eagerly,' 'strive eagerly for,' *petisso/petesso, expetesso.* This extension of the use of the suffix *-i̯o-s,*[38] to form directly from the stem of a verb a noun denoting the actor, is interesting. We may compare the opposite phenomenon in the occasional use of *-tor* to form such nouns from a noun stem instead of the usual verbal stem: *ianitor,* 'one who tends the door,' from *ianua,* 'door,' etc. *ē- < ecs-,* compare *ē-* in *eviśϑo.*

(38) *arai,* .ārai̯, genitive or locative of *ārā,* 'altar,' also 'sacrificial bowl' (*CIE.* 8414; *EI.,* 19), Latin and Venetic *ara,* Umbrian *asa,* Oscan plural *aasas.*

(39) *tis,* .dis < *̣du̯is, 'twice,' here 'for two years'; Old-Latin *duis,* Latin *bis,* Greek δίς, Sanskrit *dviḥ,* etc.

(40) *φoke,* .poce, nominative of *φoki* (19); Italic *̣ocos, 'seer' = Greek σκοπός, 'watcher.' For *sp-/p-,* compare Sanskrit *spáçati/páçyati,* 'sees.' .poc-ə : s-pec-to :: σκοπός : σκέπτομαι. φ = *p* (*E.,* 20). -ə < *-o* < *-os* (*E.,* 83). It will be observed that *φoke* is the only word in these inscriptions in which the *-o* < *-os* (*eviśϑo, Tavarsio,* (*ko*)*ro, haralio, eptesio*) betrays obscuration. The explanation is probably to be found in the fact that a vowel immediately following or preceding a stressed syllable is most exposed to obscuration. Similarly, in *Saturday* and *yesterday,* although the stress on the last syllable is very slight, we may still hear the *-ei* of fully stressed *day* (.dei), though most speakers reduce it to *-e* or *-i,* especially before a stressed syllable, as in *yesterday morning;* whereas the reduction is universal in *Monday, Tuesday,* etc., which have the same stress status as *φoke.* The *-o* of (*ko*)*ro* (33) is probably due to the following *m.*

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[38] Brugmann, *Grundriss²*, Vol. II, Pt. 1, p. 186.

EXCURSUS I: *SERONA*

There are various forms of the name of this divinity in other dialects, some of which may be noted here. It is important to bear in mind that, as such cults pass from people to people, the phonology of the name frequently differs from what we should expect in a given locality. The Gallic *Sīrōna* shows the regular Celtic rise of *ē* to *ī*. Among the Petrocorii of Aquitania we find the goddess *Vesunna* (.u̯ēsōnnā) and her town with the same name. Here we have *V-* as in *Verona*. The *-s(s)-* < *-r(e)s-* shows the opposite assimilation from that found in Oscan *sverrunei* and in **Verrōnā* < *Vērōnā*. The *-nn-* reflects earlier *-ni̯-* (see below). Latin *Fessōna* shows the same treatment of *-r(e)s-*. Its *F-* is seen also in *Fērōnia* (Etruria, Latium, Sardinia). This betrays the change of initial *su̯-* to voiceless *h̤* (like English *wh-*), as in Greek.[1] But this *h̤* then became φ-, later *f-*; while in Greek it became *h-* and later disappeared.[2] Medial *-ess-/-ēs-* < *-er(e)s-* and *-u-* = *-ō-* are seen also in Marsian *Uesune* and Umbrian *Vesune* (both datives of the name of the goddess, with *-ę̄* < *-ai*) and in Etruscan *Vesuna*.[3] There are similar names[4] that may be of different origin and which it is difficult to distinguish, for example, *Seϑre Verunia* (*CIE.* 4336), *Hastia Vipinei Verunia* (*CIE.* 2227); cp. *Vl. Vipi Veru* (*CIE.* 544) from the same place. But Schulze is certainly wrong in his strained attempt (p. 165) to make it appear probable that the worship of Feronia developed out of a family cult. We have to do with a great international cult, whose prophetess-divinity got her name .Su̯er-es-ōn-i̯a in a very different way. Even if we were limited to the name Feronia, it is begging the question to account for the extent of the cult, from Luna at the extreme northern limit of Etruria to central Latium and even to Corsica, by saying, "so könnte in der Tradition der Ahnherr der gens *Ferennia* oder *Feronia* geheissen haben, die zu einer Göttin *Feronia* betete und ihren Kult weithin ausgebreitet hat." The Gallic Sirona was paired with an Apollo. Siva, the mate of Serona at Verona and on Lemnos, was a form of Apollo. The chief sanctuary of Feronia was at the foot of Mount Soracte, on whose summit stood the sanctuary of Soranus, also identified with Apollo. Because of the similarity of the cults of Feronia and Soranus and their proximity, Müller[5] regarded them as originally one. He did not, of course, realize that the first syllable of *Fer-onia* is the same as the first syllable of *Sor-anus* and *Sor-acte*. In the two latter we have to do with .sor- < .su̯er- exactly as in Latin *soror* < .su̯eror/.su̯esōr. *Soranus* is a formation parallel with *Serona/Feronia*. *Soracte* < .Su̯er-ag-ti- is an abstract in *-ti-* meaning 'the pronouncing of an oracle.' As a geographical name (compare 'Αϑῆναι), the locative-ablative *Soracte* displaced the nominative *Soractis* and thus caused the word to be regarded as a neuter in *-e*.[6] That we should have at Soracte the diverse dialectic forms *Soranus* and *Feronia* is not at all strange. It stands where the lands of four nations meet: Latins, Sabines, Umbrians, and Etruscans, not to mention the Faliscans.

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[1] Brugmann, *Grundriss*², Vol. I, p. 313.

[2] In English, labialized χ became *h̤*, which then underwent both developments, but under different conditions; compare *tough* (.tuf) with *though* (.ðou), etc., Jespersen, *Modern English Grammar*, I, p. 286 ff.

[3] One thinks also of *Varuna*, the great god of early Hindu mythology, but cannot see how connection could be established.

[4] See Schulze, *LE.*, under *verunia*, *Vessonius*, *Vesonius*, *Feronia*, etc.

For the sake of simplicity, one may speak of Serona and Verona as *ā*-stems, just as scholars generally treat the cognate Umbrian *Vesune* and Marsian *Uesune,* referring to such other names of goddesses as Umbrian *Puemune* (dative), Volsinian *Declune* (dative), Latin *Bellona, Fessona, Pomona,* etc.[7] But it now appears that *Verona* and most, if not all, the others were originally Etruscan words ending in *-ōn-i̯ā* > *-ōnni̯ā* > *-ōnnā* > -ōnā. In the first place, considering the extreme rarity of Latin words ending in *-ōna,*[8] it would be strange if numerous names of divinities had this ending. We know that the Romans got many of their cults from the Etruscans, directly or through neighboring peoples, like the Sabines. We find some of the words in question have variants ending in *-ia,* for example, *Verona/Feronia, Fessona/Fessonia* (by popular etymology associated with *fessus,* 'tired'), *Angeronia, Fluviona / Fluvionia. Vesunna* (.u̯ēsōnnā) still shows the gemination of *n* caused by the following *-i̯-,* thus betraying *-ōnnā* < *-ōnni̯ā* < *-ōni̯ā.* That one or another of the divine names found in Latin may have been formed by analogy to others got from the Etruscans is, of course, quite possible. But there is no reason for us to postulate original *-ōn-ā* stems in Italic or Celtic because we find such names as *Verona, Uesune, Vesunna,* etc. I shall show later[9] that even the name *Roma* is Etruscan for real Latin *Rūmia.

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[5] Müller und Deecke, *Die Etrusker,* II, 68.

[6] We have an interesting parallel in *Praenest*e for .Praenestis, the gender still wavering in classical times between the older feminine and the later neuter.

[7] Von Planta, II, 4.

[8] Disregarding words obviously adopted, we have, so far as I know, only *annōna, mātrōna, patrōna, caupōna, colǫna, talpōna, persōna.* Of these, the first three are not *ā*-extensions of *on*-stems, but *nā*-extensions of *u-/ū-/ōu̯*-stems; compare *annu-us, mātru-ēlis, patru-us* (Brugmann, *Grundriss*^{2}, Vol. II, Part 1, pp. 280, 206, 211). *caupōna* (cp. *copa*) and *colōna* are obviously attempts to feminize *caupo* and *colōnus.* This *colōnus,* itself a strange formation in place of *colōnius,* was doubtless modeled after *patrōnus* because of the frequent contrasting of the master and the farm laborers; compare Cicero, "patronus, defensor, custos coloniae." The origin and nature of *talpōna,* reported by Pliny as a kind of grapevine, are wholly unexplained. Finally, *persōna* is now recognized as an adopted Etruscan word; compare *φersu* (.per'sō), written twice (*A.* 792, 798) next to pictures of masked players (Deecke, *EFS.,* VI, 47; Skutsch, *Archiv für lateinische Lexicographie,* XV, 145 f.). The basis of the Etruscan words (see Walde) was doubtless Greek πρόσωπον, plural πρόσωπα, 'face,' 'mask,' 'dramatic part,' 'character,' 'person.' In early Greek the plural was more common, even in speaking of a single person. The plural πρόσωπα became Etruscan .pro'sōmā > .per'sōnā, with teleterosis of *p–p* to *p–m-* > *p–n-* and change of unstressed *pro-* to *pr̥-* > *per-,* the opposite of the change of Περσεφόνη to *Proserpina,* which was probably partly due to the fact that the serpent was sacred to Ceres and

her daughter. This Etruscan *persōnā* reappears in Latin *persōna,* 'mask,' 'dramatic part,' 'character,' 'person,' rarely 'masked player.' On the other hand, the Greek singular πϱόσωπον became Etruscan .proˋsōmon > .perˋsō(n), written *φersu,* 'actor.'

[9] "Excursus III."

EXCURSUS II: *SIVA*

Śiva[1] does not occur in the Vedic hymns as the name of a god, but only as an adjective in the sense of 'kind,' 'gracious,' applied to the terrible god Rudra, whose post-Vedic representative Śiva was.

The name of a god is subject to change. What was at first but an epithet is likely to become the name, and this name may in turn be displaced by some other epithet. Nor is the character of a god permanent. What was at first only an incidental phase of his character may develop into the most prominent element of his nature, and other phases may become "female energies" (wives) or independent divinities. Moreover, a deity having some one or two elements in common with another deity may thereby come to assume still other characteristics of him, or even to blend with him.

The old weather god Rudra 'the howler,' the god of the howling storm, terrible as a wild beast, whose arrows bring disease and death to men and cattle, was akin to the bull-god of the Hittites and the Jews, the great god of the mountains, the god of thunder, lightning, and storm, who roars from Zion, who hath his way in the whirlwind, and the storm and the clouds are the dust of his feet, his fury is poured out like fire (the lightning) and the rocks are broken asunder by him. As the god of the lightning, the weather god was akin to the god of light and fire. As god of wind and hail, lightning and fire, he was the great destroyer, in contrast to Brahma the creator and Vishnu the preserver, his two companions in the trinity. As god of thunder and lightning, he, like Tešup, was represented as a bellowing bull, or as standing upon the back of a bull as he hurls his lightning and his thunderbolts. This identification with a bull caused him to be conceived of as the protector of herds and flocks and also as the representative of masculinity, thus assuming the characteristics of the god Pushan. Consequently, under the name of Śiva, he became the god of fertility and reproduction, while his function of god of the mountain tempest, the great destroyer, passed to his consort Pārvatī, the daughter of the god of the Himalaya mountains. He was also called *kapardin,* 'wearing his hair spirally braided like a shell.' Śiva is said to have first appeared in the beginning of the present age as Sveta 'the White,' and he is invariably painted white.

In this brilliant god of the lightning and the light, who, when wroth, by his fleet arrows smote men and cattle with the pestilence, this curly-locked protector of herds and flocks, to whom the country man prayed that he avert the parching heat and save the fruits and crops, the prolific god who gave blessing to those newly wed—in him it is not difficult to recognize Phoebus Apollo, "the bright god" of the Greeks.

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[1] Most of the following statements as to Rudra-Siva are copied, often verbatim, from the articles "Brahmanism" and "Hinduism" by Eggeling in the *Encyclopaedia Britannica.*

We have seen how readily the god of lightning could be confused with the god of fire and the sun. In one of the later works of the Brahmana period, the attempt is made to identify Rudra with Agni, and in a passage in the Mahābhārata it is stated that the Brahmans said that Agni was Śiva. Agni, the Hindu god of fire, was worshiped as fire on earth, as lightning, and as the sun. Now, in 1887 Schroeder[2] made it very probable that the name *Apello/Apollo* was nothing but an epithet of the god of fire, appearing also in Sanskrit *Agni Saparyeṇya,* 'the adorable fire (or light).' In 1913 I was able to make[3] this theory a certainty, by calling attention to the original form of *Apollo/Apello* in Hittite Greek Σαπελλω,[4] accusative Σαπελλγομα,[5] corresponding to Sanskrit *Saparyeṇya.* It will thus be observed that *Agni Saparyeṇya* = 'adorable fire,' *Helios Sapello* = 'adorable sun,' and Rudra-Śiva = 'gracious Rudra' are parallel designations. Furthermore, the Gallic inscriptions in honor of Sirona mention Apollo as her consort; and the consort of her double Feronia at Soracte (see "Excursus I") was an Apollo to whose worship clung some of the ceremonials of the old god of death or destruction.

All this reveals the very interesting fact that the worship of the Hindu god Rudra-Śiva early found its way not only to Egypt but also to the Aegean and to Italy,[6] but that, while the worship continued, the god soon came to be known by his Greek name Apollo. His mate Serona 'voice,' 'prophetic voice' (see "Excursus I") is obviously the personification of the oracular side of Apollo's nature; much as in India Sarasvati, the divinity presiding over speech and learning, was associated with Brahma. The worship of Śiva on the island of Lemnos and in northern Italy would appear to be a remarkably early and unexpected evidence of Indian influence on Mediterranean lands. In itself it is sufficient to corroborate Herodotus' story of the coming of the Etruscans by sea from the western coast of Asia Minor, rather than over the Alps into the valley of the Po.

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[2] Schroeder, *Kuhn's Zeitschrift,* XXIX, 193.

[3] Hempl, "The Old Doric of the Tel el Amarna Texts," *TAPA.,* XLIV, 192.

[4] Spelled *Sapalulu* in Egyptian hieroglyphic writing, *-lul-* spelling λλ.

[5] Spelled *Subbil-uliuma* in Assyrian cuneiform writing.

[6] I have no means of verifying Forlong's statement that "in Ugro-Finnic and other Turanian dialects Zivo, or Sivo, is 'faith' or 'order,' and Saiva is a protecting deity among the Lapps," *Faiths of Man,* III, 308.

It is generally held that the adjective *śiva,* 'kind,' 'gracious,' was applied to the terrible god Rudra euphemistically, as the Hellenic Furies were called Eumenides. This may be so. The fact that he was appealed to to protect cattle[7] does not furnish evidence that "he was not essentially a malevolent deity."[8] The fact that he was regarded as the protector of the herd was due, as we have seen, to the fact that the thunder-voiced god of the tempest was conceived of as a bellowing bull. Besides, it was natural that the god who sent the drought and the pestilence should be besought to withhold his shafts, just as the Veneti prayed Aišus (Latin *aestus,* 'heat') to send dew and rain for the parching crops. Nevertheless, it must be borne in mind that sun and fire have both a beneficent and a destructive nature, a fact supposed to be represented by the two faces of Agni,[9] and, if so, of Janus, the Old-Italic god of the sun on its course, and of the Etruscan god of light *Θuflta,* that is, **Θupultā* (*EEI.*).

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[7] See "Rudra," *Encyclopaedia Britannica,* XXIII, 818.

[8] *Ibid.*

[9] See "Agni," *Encyclopaedia Britannica,* I, 378.

ETRUSCAN INSCRIPTIONS

1. Bilingual, F. 251 and II, p. 28, plate = *CIE*. 428

Aelχe Fulni Aelχes Ciarϑialisa
Q · Folnius · A · f Pom Fuscus

In order to understand a bilingual one must bear in mind that the Latin counterpart of an Etruscan or other dialectic name often is not an exact rendering: the praenomina are frequently different (Skutsch, *PW*., 791.19) and the Latinization is likely to be partial only. This is a common practice the world over and a matter of everyday observation in America. Slavs and non–Indo-Europeans usually adopt new first names, the Japanese having a predilection for Henry, Harry, and Frank. This particular bilingual is typical and highly instructive.

Pauli was unable to explain the praenomen *Aelχe* and so substituted *Velχe* for it, harking back to the family name *Velχa* (Schulze, *LE*., pp. 377 f.). But the praenomen *Aelχe,* genitive *Aelχes,* occurs twice in the inscription and all the records show a distinct *A*- in both cases; nevertheless, Pauli thought he knew better what the stonecutter intended to cut (*CIE*. 428). In reality *Aelχe* is all right. It is from older **Ailχe* (§ 52 above), which arose (by the metathesis of χ) from **Aχile,* earlier *Aχvile* (No. **15**), Latin *Aquillius,* and is an *io*-derivative of *Aquilus,* 'dark, dun, swarthy,' whence *aquila,* 'eagle,' and the Latinized family name *Aquila.* For this *Aelχe,* genitive *Aelχes,* we find in the Latin inscription *A,* representing the name of the father. This *A* might stand for *Aulus,* Etruscan *Aule;* but it seems to me more likely that it is a provincial abbreviation for *Aelχe,* or rather the Latinized *Aquillius.* Similarly, in the bilingual *CIE*. 3692—

Larnϑ Scarpal Lautni—
L Scarpus Scarpial l Tucipa,

it seems more likely that *L* stands for Etruscan *Larnϑ* than for Latin *Lucius.* However that may be, it would appear that the son Aelχe Latinized his first name differently.[1] He took Quintus (based on his mother's family name *Ciarϑi,* 'Quintia') as his praenomen and represented his Etruscan praenomen *Aelχe* (Latin *Aquillius*) by the Latin cognomen *Fuscus;* compare *"aquilus color est fuscus et subniger"* (Paulus-Festus).

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[1] This is paralleled in America by the occasional diverse Englishing of German family names, illustrated in the story of the immigrant whose name *Klein* reappeared as *Cline, Small,* and *Little* in the families of his three sons.

Ciarϑialisa (.ciartialisa) = *Ciarϑisa* (.ciartisa), *CIE.* 432, the cumulative (§ 12) genitive of the family name *Ciarϑi* (.cīartī). Corresponding to this we find, in the Latin rendering, *Pom.* This *Pom* stands for *Pom(ptia natus)*. But *Pomptia* is the feminine of .Pomptius, later *Pontius,* a Latinization of the *P*-Italic cognate of Latin *Quintius;* compare Oscan *Pomties.* Our inscription was found at Arretium, near the Umbrian border, and it is well known that there are many Umbrian names in Etruscan. We should thus learn, if it could not be otherwise proved, that *Ciarϑi* (.cīartī), by-form of *Ciarϑia,* is the Etruscan cognate of Latin *Quintia* and of early Umbrian *Pomptia.* Then, Etruscan **Ciarϑe,* earlier **Cearϑe,* genitive *Cearϑiś* (F. 1640–1642) is the cognate of Latin *Quintus.* In other words, **cearϑe,* or **ciarϑe,* is the Etruscan ordinal of *ce,* or *ci,* 'five.' It thus becomes clear that *-arϑe* (.arte, earlier .artos) is an ordinal ending that arose in Etruscan *χvarϑv* (§ 99), Latin *qua(tu̯o)rtus,* and was analogically extended to the following ordinals. We now see why the younger *Aelχe* chose the praenomen *Quintus,* it being the name of the founder of his mother's family. In this connection it is also interesting to observe that Cicero mentions an *L. Pontius Aquila.*

It remains for us to consider Etruscan *Fulni* (.fol`nī), Latinized as *Folnius.* The real Latin form corresponding to *Fulni* was *Fulvius.* This fact escaped Schulze, though *Fulvia Sisennia* (*LE.*, pp. 168, 170) from Volaterrae, the cradle of the *Fulni* family, might have given him the tip. Our *Folnius* is only a partial Latinization, a substituting of the Latin ending *-ius* for the native *-i,* corresponding to the Latinization of Oscan *Pompties* into *Pontius* instead of into *Quintius.* Compare the Englishing of German *Wannemacher* into *Wanamaker* instead of into *Tubmaker* or *Cooper.* It is perfectly clear that when *Fulni* was changed to *Folnius,* the Latin *Fulvius* was not at all in mind. But even if it had been in mind, there is nothing in it that could have induced the spelling of *Folnius* with an *o.* We are therefore forced to believe that this Latin *o* spelled the sound that was represented by *u* in the native spelling *Fulni.* In other words, Etruscan *o* (at least the *o* that arose out of *e* before *l,* § 49) had not merged in *u* in Etruscan, though it was not distinguished from it in Etruscan spelling. When employing Latin script in writing native material, the Etruscan, like the Umbrian (Buck, § 49), simply availed himself of the Latin superior means of representing native sounds.

The history of the Etruscan name reflected in *Fulni* and in Latin *Fulvius* is as follows. Etruscan *Fulni* (.fol`nī) is an old feminine nominative (§ 14) of early Etruscan **folnios.* This and Latin *Fulvius* are *io*-extensions of the adjective *fulvus* < *ḥo̤lmos < .ğhelwos, 'tawny,' doubtless the name of the founder of the family; compare *Aelχe* and *Fuscus* above, and names like *Brown, Black, White,* etc. For the change of .ğh to .χᵘ, later *h̤* (spelled *vh*), later .φ > .f (spelled *f*), see § 57. For *el* > *ol,* see § 49. For *w* > *m* > *n,* see *persona* in "Excursus I." For forms with the intermediate *m,* compare *Vhelmus* (.h̤el\`mōs), Ga. 934, the genitive of \**vhelmu* (.h̤el\`mō), an *ōn*-derivative of **Vhelme,* whence the feminine *Felmui* (.fel\`mōi), F. 365, 273, etc. *Vhelm-u-* (.h̤el\`mō), an *ōn*-stem, and *Fuln-i* (.fol\`nī), an *io*-stem, are thus parallel derivatives ("identisch," in Schulze's terminology) from .ğheluos, Latin *fulvus.* There are various forms of the name that have suffered further assimilation and other phonological changes, possibly due in part to the one-time presence of the *n* of the *n*-suffix. Thus, *Vhelm-u-* (h̤el\`mō) also became *Fulu* (.fol\`lō), *CIE.* 118, or *Hulu* (.hol\`lō), *CIE.* 2086, with the well-known variation *h̤* > *f* or *h* (§ 57). Of *Fulu* (.fol\`lō) we also have the derivative *Fuluna* (.fol\`lōnā or -ǭ < .fol\`lōnia), *CIE.* 52. The feminine derivative *Fulnai* (.fol\`nāī, -nai), *CIE.* 46, betrays a masculine nominative **Fulna* (.fol\`nā), which was originally a feminine ablative **Fulniā.* Various forms of the name occur side by side, especially at Volaterrae. The legal agreement (*CIE.* 52*a*) alone contains the three forms *Felmui(al)*, *Fuluna,* and *Fulnei.*

It will be observed that in Latinizing his name, the younger *Aelχe* (or *Aquillius*) retained his family name *Fulni* (.folnī) in the partially Latinized form *Folnius,* represented his Etruscan praenomen *Aelχe* (Latin *Aquillius*) by the synonymous cognomen *Fuscus,* expressed his relation to his parents by *f*(*ilius*), represented his father's name by *A*(*quillius*), the Latinization of *Aelχe*(*s*), and his mother's name by *Pom*(*ptia*), the Latinization of the Umbrian form of the family name *Ciarϑi,* and also employed as a cognomen the cognate *Quintus.* I should add that it may very well be that the mother was of Umbrian extraction and that her family name really was originally Pomptia, which was Etruscanized as *Ciarϑi* and later Latinized as *Quintia.*

2. F. 69.[2] Bilingual (Pesaro)

.... *atius · L · F · Ste · haruspe*[*x*]
Fulguriator
[*C*]*afates Lr · Lr · netśvis trutnvt frontac*

netśvis. The word also appears on F. 560 *ter* h: *Nae Cicu Peϑnal netsviś.* The first element is probably cognate with Latin *natis,* here used for *exta* (compare, for the meaning, Greek τϱάμις), and with *i*-mutation of the *a.* The second element *-śvis* is cognate with Latin *-spex* [notice the final *-ś* of the word in F. 560 ter *h* above]. For similar change of *p* after a consonant cp. *cver* < *cupeirom, 'Cyprian (metal),' *Tanaχvil* (4), *svaϑlu* < σπαταλος (5).

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[2] [Adapted from "The Tuscan Tung."—F. A.]

trutnvt fronta-c, as shown by the position of the *-c* (*-que*), forms a conglomerate in spite of the separation of the two members. *trutnvt* < *trutinātōr; compare Latin *trutinator,* 'examiner.' The shift of stress is due to the combination *ˋtrutnvt–ˋfronta-c;* compare the similar shift in *ˋProfessor ˋKluge.*

fronta = Latin *fronta* (seen in *frontesia,* 'Donner und Blitzteichen,' Bücheler, *Rh. Mus.,* XXXIX, 408 ff.), Greek βροντή, 'thunder,' etc. This relationship is so patent that Thulin (*Etr. Disc.,* I, 156) remarks, "Natürlich muss es als Lehnwort aufgefasst werden." [But when was it borrowed? Certainly not at the time when the Romans themselves adopted the "Etruscan Discipline"; one might as well expect to find Gothic words in the vocabulary of the Roman Church. Hardly during the epoch of Roman ascendancy; for the terminology of an ancient and established institution resists innovation.—F. A.]

[Hammarström (*Glotta,* XI, 212) suggests as a clue to the etymology of *netśvis,* Greek νηδύς, τα νήδυια, 'belly,' 'bowels,' etc. Of course there is no reason to posit, as he does, an "Etruskisches-vorgriechisches" **netu* or **netusi* or *νηδυσϝια. Better: **nēdu-spex* > **nēd-spex* > *netswiś,* the .d being unvoiced by the following *sp,* and the *e* of *-spex* raised to *i* by the *w* < *p.*—F. A.]

3. ***CIE.*** **1118** (cover), **1119** (ossuary). *Pienza* (near Clusium)

Ane · Cae · Vetus · Acnai-ce
Aneś · Caeś · puil · hui · iui · ei · itruta

'Ane Cae [son] of Vetu, and Acnai
Ane Cae's wife, here restored to him.'

Acnai .agnai; cp. *Aχnei, CIE.* 220, etc. (For the ending see *Tarnai,* **4**.)

puil, .pōil, 'wife,' originally 'maid'; compare Greek παῖς, 'child,' 'lad,' 'maid,' etc. Our word is from an oblique case in which the *-d-* > *-l;* compare the genitive *puil* (< *puil*(*a*)*l*), *CIE.* 15.

hui, .hoi, a locative; compare Latin *hūc* < **hoi-ce.*

iui, .iwi = *ibi;* added to *hui* just as *-ce* was added to *hoi* in Latin. It was similarly added to *iśi* (cp. Latin *isti-c*), as in F. 2590 *ter: iśi iui.*

ei, .eī = Latin *ei.*

itruta, .itrətā < *iterətā = Latin *iterata.*

4. F.I 387

tute : larϑ ; anc ; farϑnaχe : tute : arnϑals lupu : avils :
esals : cezpalχals
haϑlials : ravnϑu : zilχnu : cezp : purtśvana : ϑunz

The text is carefully and uniformly punctuated, except before *lupu* in the first line. The first part of line 2 contains the genitive of a woman's name, which must belong with the genitive of a man's name in the end of line 1. The second part of line 2 contains official titles that evidently belong with the statement about his age in the end of line 1. Then it is obvious that our inscription must stand on two sides of a sarcophagus and that each side is to be read by itself, thus:

(ON ONE SIDE)

Tute Larϑ, anc farϑnaχe Tute Arnϑals
Haϑlials Ravnϑu

(ON THE OTHER SIDE)[3]

Lupu avils esals cezpalχals
Zilχnu cezpz purtśvana ϑunz.

From this we see that the name of the occupant of the tomb was *Tute Larϑ* and that he bore the relationship *anc farϑna-χe* to *Tute Arnϑ* and his wife, *Haϑli Ravnϑu.* Now, *Tute Larϑ* and *Tute Arnϑ* are clearly members of the same family, and hence have a blood-relationship expressed here by *anc.* The relationship of *Tute Larϑ* to the wife of *Tute Arnϑ* must have been a relationship by marriage, here expressed by *farϑna. "Tute Larϑ,* the *anc* of *Tute Arnϑ* and the —in-law (*farϑna*) of his wife, *Haϑli Ravnϑu."*

farϑna = Latin *fratria,* 'sister-in-law' (compare Greek φράτρα, etc., with different meaning). In Etruscan the word meant either 'sister-in-law' or 'brother-in-law.' The -*χe* added to the word is the conjunction 'and' = *que.*

anc (.aŋg), 'brother,' is identical with the later *an,* 'sister,' and arose by metathesis from .gnā < .gonā = Greek γονή, 'offspring'; cp. Latin *gnātus.*[4] The plural appears as *acns* (.agns) in F. 305: *acns Priumneś,* 'the children of Priam.'

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[3] [These two lines are not interpreted in the MS but most of the words are known: *'vivit annos tres (et) octingentos judicavit octo(s), purtśvana bis.'*—F. A.]

[4] The relationship to *gnātus,* etc., was suggested to me by my colleague Professor Fairclough.

With this inscription compare F. 2327 *ter* b on a tomb now in the Museum of Fine Arts, Boston. (*a*) is on one end, (*b*) along the front, (*c*) at the other end of the tomb.

(*a*) *ϑanχvil Tarnai*
(*b*) *an farϑna-χe Marces Tarnes Ramϑes-c* Xaireals
(*c*) *Larϑ Tetnies*

Larϑ Tetnies has nothing to do with what precedes. We obviously have to deal with two burials in the same tomb. The wife of *Arnϑ Tetnies* (perhaps a brother of *Larϑ*) was buried in an adjoining tomb (F. 2327 *ter* a), now also in the Boston Museum.

The first two lines read: '*ϑanχvil Tarnai,* the sister and sister-in-law of *Marce Tarna* and (his wife) *Ramϑa* Xairai.'

Tarnai (which looks like a genitive) is a feminine family name formed by adding the feminine ending -*ī* to the masculine *Tarna* (itself originally a feminine form). See § 104.

an has here lost its final -*g* and become .aŋ.[5]

The word *farϑna* also occurs as a noun modifying *seχ*, 'daughter' (or perhaps as a modifying adjective), in F. 1226 = *CIE.* 3910, *Afli Hustnal seχ farϑana.*

5. F. 315 = *CIE.* 52*b*. Lead Plate. *Volaterrae.* [The text given by Fabretti is very defective]

ϑuśaϑur Se La svaϑlu ϑupitai secetati

'May the lascivious Se. La. dry up to double dryness'

ϑuśaϑur (.tošātor) = Latin *torreatur.* For the subjunctive compare *eurat,* **19.1.**

Se La, abbreviation of *Serϑ Larϑ.*

svaϑlu (.swatlo) < Greek σπάταλος. The change of *sp* > *sw* also occurs in *-*spex* > .swis, **4.**

ϑupitai (.duppitai) < *duplicai, feminine dative of an *a*-stem. [Apparently with "telemimesis" (§ 33) of the *d,* that is: *d–c* > *d–t.* The development of this word is not altogether in accord with *ϑufiϑas* (.dupl`tā) < .dupiltā < .duplāti < .duplātiō, given in *EEI.*, page 9. (The Etruscan name for Janus). See Appendix.—F. A.]

secetati = Latin *siccitāti.*

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[5] [For this word see also Ga. 799: *larisal creices ancn.* Perhaps it is related to the verb of F. 2055, *clenar ci acnanasa,* and F. 2056, *clenar zal arce acnanasa,* which apparently mean: '*gnatos quinque creavit*' and '*gnatos tres arce creavit.*' The root suggests **adgnā*-.—F. A.]

6. F. 314 = *CIE.* 52*B*.[6] Lead Plate, *Volaterrae.* A list of Etruscan names ending with:

qaves etra qui ϑusce fvimv Larϑa pace

'quavis hetaeria qui tusce fuimus latriam pacti'

'A certain union who have agreed to services
according to Etruscan custom'

[The character here transcribed as *q* appears as ⌽ and φ on the plate and Pauli accordingly gives: *φaves, φui.* In line 8 of 52*A* there is a name beginning with the same letter: *φlavi* or *qlavi.* A *Flave* family existed near Volaterrae (*CIE.* 113 f.) and *φlavi* may be a misspelling of this name. If so, it is the only inscription in which the name is so written. Further, there are in 52*A* several other names containing the letter *f.* The question as to how far the Etruscans used φ = *q* cannot be decided without much patient research, because the letter is usually transcribed φ without criticism.—F. A.]

etra, .etrā < ἑτάρᾱ; cp. Epic ἑτάρη. For -*ā* beside the -*ǭ* of *larϑu,* see § 41.

fvimv, .fuəmo = *fuimus.* For the use of *fui* in the passive, see Hale and Buck, *Latin Grammar,* § 164.8.

pace < *pactei. The -*ē* is the intermediate step between *ei* and *ī.*

larϑu, .lartǭ < .lātriā(m), earlier *Larϑia* (a family name, compare "Freeman"). Since *ǭ* < *ā* denotes an unstressed syllable, the *ā* of the stem must have been long. This *ā* and the *au* of *lautni,* 'servant,' show that the root of λάτρον, λάτρις, *latria, latro,* etc., was *lāu, as held by Curtius and Stolz.

[This inscription and the preceding (*CIE.* 52*b*) were found together and resemble each other closely in execution, so that one might very naturally expect them to be of similar purport. *Tusce* seems to be Latin, rather than Etruscan. *Pace* < *pactei is rather improbable (cp. *Ataiun* [Acteon], F. 2148, 2149, F.I 385, etc.). On the other hand, the retention of the -*s* of *qaves* after a long vowel and before a following vowel, while *fvuimu* (preconsonantal with short final syllable) has lost its -*s,* consorts very well with Dr. Hempl's statements about the history of the weakening of final syllables; *E.,* 61, 62.—F. A.]

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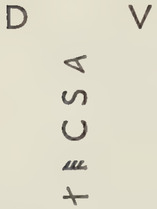
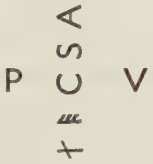
[6] [From "The Tuscan Tung."]

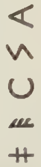
7. F. 1926 = *CIE.* 3436, 3438. Boundary Stones



Vermigli
apud Fa.



Vermigli
apud Conestab.



Conest. ex
alia descriptione

The word running up and down on the stone is *tecsa,* .tec`sā, or *zecsa,* .tsec`sā. It may well be that the stones differ in this, one having one spelling and the other two the other. Or all may have ‡, the lower stroke not being distinct in each case.

zecsa, .tsec`sā, is an early form of *śā,* 'six.' .tec`sā would be a normal intermediate form (§ 98). What significance the number has on the stone I cannot say.

The significance of the letters **D V** or **P V** is so simple that it should not have escaped solution. We have to deal with boundary stones found on Mount Tezio, just east of Perusia. At the foot of this mountain runs the Tiber, supposed to form the boundary between Etruria and Umbria. The **V** evidently stands for *Umbria* and the **D** or **P** for *Rasenna,* the native name of the Etruscan people. See Pauli, *AIF.,* Vol. II, Part 2, pp. 173 ff.

8. F. 2147. A Pictured Bowl[7]

Xaru Aivas
Pentasila hinϑia Turmucas

'Charon, Ajax
the dead Penthesilea (daughter) of Andromache'

Turmucas, genitive of .dormǝcā < andromacā. [This change suggests that the Etruscan name for Mercury, *Turmś,* may be akin to δρομεύς or δρομαῖος.—F. A.] Both Penthesilea and Andromache were Amazons, but it is nowhere said that they were related.

hinϑia, feminine nominative singular of *hintios < (by mutation) *hontios, 'pertaining to the lower world,' 'dead,' etc. Compare Umbrian *Huntia,* 'festival in honor of Hontus, god of the lower world.' The root **hont-* is from *hton = χϑών, 'the earth'; hence .hontios = χϑόνιος. [The change *hton- > hont- is probably due to compromise with the root seen in Latin *fundus*.—F. A.] The word occurs frequently in Etruscan: so cp. F. 2162, *vanϑ hinϑial Patrucles,* 'spirit of the dead Patrocles'; *vanϑ* = Venetic *vantei,* 'spirit' (*V.*, No. 12), Latin *ventus.* Cp. likewise *CIE.* 4116, which begins: *cehen suϑi hinϑiu ϑueś,* etc., 'in this subterranean tomb you see,' etc.

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[7] [Adapted from "The Tuscan Tung."]

cehen (.çēen) < *cei-en, 'in this,' a locative-demonstrative; cp. ἐ-κεῖ (Brugmann, Vol. II^2, Part 2, p. 180) with preposition *en* postfixed as in Umbrian.

suϑi (.sutti) < *tsup-tīd < *csup-tīd (Latin *sup*), locative-ablative of an abstract in *-ti* (cp. κτίσις, etc.), 'the down below,' 'the grave.' A common Etruscan word, whose meaning has long been known. The original .cs- is betrayed by the *ś* of *śuϑis, EI.*, 24. There are various related words in Etruscan.

hinϑiu (.hintiō) < *hintiōd, masculine for feminine ending as in the genitive.

CRETAN ETRUSCAN

9. The Praesos Inscription

The most archaic Etruscan inscription known to me is by no means the oldest, but reflects unique local conservatism. It is no other than the famous inscription (see Frontispiece) found at Praesos, in eastern Crete, called the Nomos Fragment, and supposed to be "Eleocretan" of the fourth or third century B.C. The first sentence is intact and, though without punctuation, is easily read by one having some familiarity with Etruscan. It certainly should never have caused serious difficulty to a profound Italist like Conway.

My text is that presented by Conway,[8] but the division into words is mine. The first two lines read:

Ona desiem et epim itsφa doφmrala φraisoi inai

.ōnā .dēsiēm .et .ēbīm .itsˋpā .dopm̥ˋrālā .praisōi .i(n)nāi

Old-Latin: Unā(d) dēsiēm et ēbibēm ista ipsa δαπανᾱϱα Πϱαισοι illai.

'At one and the same time I shall be away and shall consume those very offerings in this Praesos,' or 'Though absent, I still shall consume these very offerings here in Praesos.' That is, the deity is represented as assuring his worshipers that, though not visible to them (possibly as being a foreign god that had only a *Filiale,* or mission, at Praesos), he still would appreciate offerings made to him at Praesos. The priest that put up the notice doubtless saw to it that the offerings disappeared before daylight.

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[8] Conway, "The Pre-Hellenic Inscriptions of Praesos," *Annual of the British School at Athens* (1901–1902), VIII, 125–156.

ōnā, 'at one and the same time,' Latin *una;* for *ō* < *oi,* see § 53; for *-ā,* § 40 (2).

dēsiēm, 'I shall be absent,' present subjunctive (Old-Latin (*dē*)*siēm;* compare also Etruscan *śiē*(*d*), **16**), here used as a future indicative.

ˋ*ēbīm* (ˋ.ēbīm < .ēbi(b)ēm), 'I shall drink up' or 'consume,' for original .ēbibō (Latin *ēbibām*) by analogy to *e*-subjunctive forms of the second singular, etc. (Latin *ēbibēs*), but here used as a future indicative. For *-bi*(*b*)*ēm* < *-bibēm,* see § 33; for *-bīm* < *-biēm,* compare Latin *sim*, earlier ***sīm* < *siēm.*** See also *desiem,* above.

et, 'and.'

itsφa (.itsˋpā), 'these same,' 'these very' < .istā .ipsā. For *-ā,* see § 40 (2); for *tsp* < *stsp,* § 33.

doφmrala (.dǫpṃˋrālā), 'offerings' < .dapm̥ˋlārā < .dap(ə)nārā, δαπανᾱϱα. The labialization of unaccented *a* into *ϱ* was doubtless due to the following labial consonants. Observe also that the dental nasal *n,* by partial assimilation to the labial stop *p,* became resolved into the labial nasal *m* and the dental liquid *l.* For *doφmrala* < δαπανᾱϱα in the sense of 'offerings,' compare Latin *daps,* 'sacrificial feast,' 'offering,' Old-Icelandic *tafn,* 'sacrifice,' 'offering.' See *daps* in Walde.

φraisoi inai is a locative-dative. *in*(*n*)*ai*/*illai* shows the older nominal inflection.[9]

ETRUSCAN FROM NEAR CORNETO

10. Ga. 771, on a bird-shaped decanter

Mi mulu Kaviiesi
(.mī .mollo .gāwiīēsī)
'This is Gajus' honey-wine'

mī, see *ąme* in **19**, line 2.

mulu (.mollo), 'honey-wine' < .melsom, Latin *mulsum.* For *o* < *e,* see § 49 (3).

Kaviiesi (.gāwiīēsī or .gāwī(y)ēsī), genitive of .gāwio(s), Oscan *Gaaviis.* For *-ī-ēs-ī,* see § 85. The later Etruscan form *Cai* (*CIE.* 3736), also *Cae,* genitive *Caes* (*CIE.* 1825), shows the same loss of intervocalic .w that is seen in Latin *Gajus.*

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[9] Sommer, p. 430.

EAST-ITALIAN ETRUSCAN

11. The Novilara Pedestal[10]

An excellent starting-point for the study of Etruscan is furnished by a very old inscription from Novilara, on the eastern coast, near Pesaro, the ancient Pisaurum. Here we find the language as it was spoken about 600 B.C., after some of the most characteristic Etruscan changes had taken place but before others had disguised its Indo-European character. It has thoroughly baffled Etruscan and Italic scholars, who failed to realize that it is exactly the kind of material that shows later Etruscan in the making and enables us to see what it was derived from. Skutsch[11] says its "etruskische Natur ist nicht völlig gesichert," and Sommer[12] frankly declares, "Gänzlich unbestimmbar sind die sogenannten 'Novilara' Inschriften."

It will be best to say a few words as to the script employed in this inscription. The only letter for the *s*-sound is 𐌑, usually transcribed *ś*. As this letter is, in this inscription, not employed to distinguish .ś from .s (§ 27), there is no good reason to transliterate it *ś*, and I shall therefore use the familiar *s*.

To represent *o* and *u* we find **O**, **V̇**, and rarely ᚦ. The last represents *u* in *anvs* and occasionally in diphthongs: *uvlin* (.ọulī), *kruv*(*s*), line 4. Either **O** or **V̇** may represent either *o* or *u*. The **V̇** with a little upright mark or dot in it reminds one of the later use of a dotted **V** to represent Oscan *o* as distinguished from **V** *u*. But no **V** *u* occurs in the Novilara inscription, and there is nothing to lead us to believe that the dotted **V** ever had in this Etruscan script the differentiating use it had in Oscan. In fact, it was employed exactly as the undotted **V** was in other Etruscan inscriptions, that is, to represent either *u* or *o*, the only difference being that **O** also was used with the same values. Still, it must be that the dot was added to the **V** for some purpose; and it is not difficult to detect what that was. The letter **V**, as it appears in use, is often so much like **V** *l* that one has difficulty in distinguishing them. It is therefore more than likely that the dot was added, not in order to produce a new letter, but to make the letter for *u* more readily distinguishable from the letter for *l*—exactly as the small letter *i* was, in much later times, given a dot to distinguish it from one of the strokes of the letter *m*, and as writers for the press now put a stroke over the *n*'s in their copy in order to prevent them from being read as *u*'s.

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[10] Skutsch, *PW.*, 780.39 ff. Lattes, *Rendiconti della Reale Academia dei Lincei*, Serie V, Vol. II, pp. 775 ff., 855 ff. Hermes, XXXI, 465 ff., XLIII, 32 ff. Jacobsohn, *Altitalische Inschriften*, 26.

[11] Skutsch, *PW.*, 780.39 ff.

[12] Sommer, 12 *Anm.*

There were thus in use among the Etruscans of eastern Italy two varieties of **V**, either of which could stand for either *u* or *o*. And it was not strange that these were differentiated when they were adopted by the Oscans, particularly when we observe that the Oscans did this sort of thing in other instances. The adding of a similar small stroke | to represent an open *į* was doubtless suggested by the use made of the dotted **V**. However that may be, there clearly is no object in transcribing our dotted **V** by *u,* as though it had the function that it later acquired in Oscan. Otherwise I have followed Latte's transcription.

It will be observed that this very early Etruscan already shows *r* from intervocalic *s* (*erut* 1, *isairon* 3, § 71) ; *l* from intervocalic *d* (*polem* 3, 12; *telet* 11, § 66).

Final *-s* (§ 62) is still intact, as also the preceding short vowel, for example, *partenos* 2. Final *-m,* which was one of the sounds first to weaken (§ 61), appears not only, as later, in the monosyllable *em,* but also in *polem* 3, *ipiem* 5, and *aunem* 11, and is written *-n* in *uvlin* 2, *is-airon* 3, *isperion* 6, *aiten* 7, *merpon* 8. This vacillation between *-m* and *-n* would seem to imply that the nasal had already ceased to be a consonant and continued only as a nasal affection of the preceding vowel. Another very old inscription, showing a similar status of final *-os* and *-om,* is F. 2341–2342.

[1]*Mimniś erut caareś Taveś* [2]*rotn-em uvlin*

(.mimnis .erod .cārēs .dāwēs .rutn-em .ọulī)

'May this be a memorial of dear Davos, image and resting-place'

ṃimnis (.mimnis), 'memorial'; compare the Oscan *o*-extension *memnim* < .memniom, 'monumentum,' μνῆστις/μνᾶστις, 'remembrance,' μνῆμα, 'memorial.' For *i* < *e* before *i,* see § 48 (2).

erut (ˋ.erod), 'may it be,' 'it shall be,' the volitive subjunctive, Latin future *erit* < .ered. Rhotacism is regular in Etruscan, § 71. Etruscan .erod for .ered shows the same confusion of the *e* of the third singular with the *o* of the third plural that we find in Latin *erunt* by the side of *erint,*[13] and which in Latin was ultimately decided in favor of the *e* of the singular.

caares (ˋ.cārēs), 'of the dear'; *-ēs* < *-ei-s,* genitive ending of *i*-stems, see § 85.

Taves (ˋ.dāwēs), 'of Davus,' a name often given to slaves at Rome. For *-ēs,* see § 85.

rotn- (.rutn), 'image' < *rotem* (.rutẽ) in line 7, which is the regular development (§ 83) from ῥυθμός, 'measure,' 'form,' identified by Aristotle with σχῆμα, 'form,' 'appearance,' as opposed to the reality, '*persona.*' The nominative form *rotem* (< ῥυθμός) is here used as an accusative. When followed by the conjunction *em,* 'and,' the final *-em* became *-m* and then, by assimilation to the preceding *t, -n.* So, too, in the genitive *rutnes* (.rutˋnēs) in line 5. I assume that the image, probably a bust, stood upon the pedestal.

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[13] Sommer, p. 531.

em, 'and,' see § 100.

uvlin (ˋ.ǫulĩ), 'resting-place,' αὖλιν, accusative of αὖλις, 'place to spend the night'; compare αὔλιον, 'chamber,' 'cave.' The α of αὖλιν evidently was more or less assimilated to the following *u,* that is, became an open *o,* or *ǫ.* But see *aunem* 4. For final *-n,* see § 61. For the accusative used as a nominative, see § 84.

Partenus[8] *polem isairon tet*

(.partenos .polem .isairon .dēd)

'A maid presented this pedestal'

partenus (ˋ.partenos), 'maid,' from παρθένος, 'maid.' Compare *treten* in line 11.

polem (ˋ.polẽ), 'pedestal,' 'base' < .podm̥, whence also πόδα, 'foot,' grade of Latin *pedem,* 'foot.' For *l* < *d,* see § 66; for final *-em̀,* see § 61.

isairon (.iˋsairõ), 'this' < .is-ai-so-m. Compare the origin of *is-te* and *i(s)-pse,* Brugmann, *Demonstrativpronomina,* page 81; of Old-Persian *ai-ta-,* etc., page 112; and of Oscan *ei-zo,* page 113. This assumes that *ai-so-* was formed prior to rhotacism and *is-airo-* after. This seems to me to be more likely than that we have to do with *is-* from the *ist-* seen in Latin *iste.*

tet (.dēd), 'gave' < .deˋdēd < *de-deit, whence Latin *dedīt* (archaic *dedeit*), by the side of its mate .de-ded seen in Etruscan ˋ.deled (spelled *telet* in line 11 below) and in early Latin *dedet,* later *dedit.* See Sommer, pages 575–577.[14]

The final sentence is:

Treten telet aunem polem tisu sotris eus

(.treˋtēn ˋ.deled ˋ.aunẽ ˋ.polẽ ˋ.tisu .sōtris .ēos)

'The maid presented this pedestal (or base, to serve as) the tomb of her benefactor'

treten (.treˋtēn), 'maid.' Indo-European *ğher-ğhēr became by teleterosis (§ 33) *ğher-ğhēn, accusative *ğherğhenm̥; this regularly gave us in Greek the nominative *τεϱϑήν, accusative *παϱϑένα, whence the genitive παϱϑένος (for *παϱϑνός). In combinations such as παϱϑένος ψυχή, μίτϱη παϱϑένος, etc., the attributive genitive came to be regarded as an attributive adjective or as a noun in apposition, and was also used in cases like παϱϑένος κόϱη, γυνή, etc. In this way παϱϑένος came to be regarded as a nominative and it received the inflection of an *o*-stem. It is evident that the Etruscans of Novilara, or their ancestors, adopted both the original nominative *τεϱϑήν, which in Etruscan suffered metathesis and became *treˋtēn* (line 11), and also the genitive-nominative παϱϑένος, which became .partenos, written *partenus* (line 2).

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[14] The "früher Schwund eines solchen *-d* (= idg. *-t*) im vulgären Latein: *DEDE* = dedit CIL 1^2 477 (Rom). 377 (Pisaurum, um 180 v. C.)" (Sommer, p. 273) is best explained as an Etruscan streak in vulgar Latin.

telet (ˋ.deled), 'gave,' the mate of *tet* (line 3); see above. For *l* < *d,* see § 66.

aunem evidently is a pronominal adjective meaning 'the aforesaid' and limiting *polem* as *isairon* does in line 3 above. As to its composition, there can be little doubt that *au-* corresponds to Greek αὖ, Latin *au-tem,* etc.,[15] and that *-em* is Old-Latin *em,* 'eum,' *em-em,* 'eundem.'[16] The *-n-* I should identify with the *n*-demonstrative[17] or the *l*-demonstrative,[18] intervocalic *l* becoming *n* in Etruscan (§ 67).

polem, line 3 above.

tisu (.tiśu), 'urn,' 'receptacle for the ashes or remains of the dead,' 'tomb' < .testu = Latin *testu,* 'urn.' For *i* < *e,* see § 43.

sotris (ˋ.sōtris), Latin *sōtēris,* genitive of *soter* (line 8) 'benefactor,' Latin *sōter* < Σωτήϱ, 'savior,' 'deliverer.'

eus (ˋ.ēos), 'her,' Latin *eius* (.eiyus) < .eiyos.

CAMPANIAN ETRUSCAN

12. The Capuan Tablet 18[19]

One line of the archaic text with the "mysterious dots" will suffice to establish its character as a normal and very interesting piece of early Italic. The inscription was written on the soft clay of the tablet, like the Assyrian, Hittite, and Minoan texts. It is assigned to the fifth century and shows certain very archaic features, for example, the zigzag, or βουστϱοφηδόν writing and the retention of the virama and avagraha dots (*A.* 29), as also of the labial element of *q̆* (§ 58).

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[15] Brugmann, *Demon.,* § 39 ff.

[16] *Ibid.,* pp. 33, 129.

[17] *Ibid.,* § 37.

[18] *Ibid.,* § 38.

[19] Skutsch, *PW.,* 782.3 ff., 783.64 ff. Torp, *Bemerkungen zu der etruskischen Inschrift von S. Maria di Capua.* (Videnskabs-Selskabets Skrifter. II. Hist.-Filos. Klasse. 1905. No. 5.) 20 pp. The designation "die Berliner Inschrift" employed by Skutsch is a very unsatisfactory one.

Śan·ti ϑurial·χue · s·χaϑ · canulis · mulu[20]
(.Sənˋtī ˋ̣dūrīalqe .scāt ˋ̣cānōlis .mōlǭ)
'Erect an enclosure of rough, undressed timber'

santi (.sənˋtī), 'of rough' < .senˋtī, Latin *senti,* genitive of *sentus,* 'rough.' For *a* = ə, see § 39; .ən < unstressed .en, § 46.

ϑurial (.dūrīal), genitive of .dūre, 'rough,' 'not trimmed,' 'undressed,' Latin *dūrus,* 'rough,' 'uncultivated.' For *-al* < *-ad,* see § 86. It is usually added to only one of two adjacent genitives. The fact that this early Etruscan has *u* and not *eu* (§ 54) proves that *drūrus* is from **drūros* and not from **dreuros.*

χue (.qe or .cwe), Latin *-que,* 'and.' Observe that No. **15**, too, still has .q or .cw in *Aχville.*

sχaϑ (.scāt), 'construct' < *̣scitā (§ 33) < *̣ecsciˋtā, Latin *excitā,* 'erect,' 'construct.'

canulis (ˋ̣cānōlis), 'of wood' < *̣cālōnes (§ 33), genitive of .cālō, 'wood,' 'timber'; cp. Latin *cāla,* 'wood,' *cālo,* 'wooden shoe.' For *l,* see § 67.

mulu (.mōlǭ), 'enclosure,' 'wall' < *̣mōlā (§ 33) < .mōn(n)ā < .moinyā, Latin *moenia,* 'city walls.' For *ō* < *oi,* see § 53; notice *n*(*n*) < *ny,* cp. "Excursus I"; *-ǭ* < *-a,* § 41.

The prohibition of dressed timber was due to the taboo of iron, which is repeatedly betrayed in Etruscan inscriptions.

13. The Capuan Vase

F. 2753, Plate 48, bronze vase found at Capua, now lost

The writing is normal retrograde[21] Etruscan script, without punctuation, and with *e* written either **E** or **I I**. For this inscription we are dependent upon the copy given by Minervini and reproduced by Fabretti. Conway[22] says, "Garrucci wished to read *aeraci sestam,* but there is absolutely no gap in the facsimile given by Minervini." Conway himself reads *aeraciam.* Planta[23] reads *peracisestam,* following Garrucci but restoring the true *p,* as to which he says, "Statt *p* las Minervini im dritten Wort wohl willkürlich (seiner unhaltbaren Deutung zulieb) *a*." Minervini's facsimile, as shown on Fabretti's plate, certainly has *p*. Both Planta and Conway read *Veneliis* and *Viniciiu,* interpreting the **II**'s as *ii* rather than *e*; see above. The text is perfectly normal early Etruscan, but Conway (I, 94) says, "Three words of 99 are indisputably Oscan, though the last two are something else," and Schulze (p. 410) calls it mixed Oscan-Etruscan: "Mit *vinuχs* in der oskisch-etruskischen Inschrift Conway 99 weiss ich freilich nichts anzufangen." The only reason that I can discover for this hesitation to accept the inscription as Etruscan is the fact that its Indo-European character is obvious, even to an orthodox Etruscologist.

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[20] The text as here given is based upon careful study of the official photographs. I state this specifically because Danielsson and Torp (*Bemerkungen zu der etruskischen Inschrift von S. Maria di Capua,* 7 and 9; copied by Conway, "Etruria," *Encyclopaedia Britannica,* IX, 861), doubtless after a study of the same photographs, read: *nun. tiϑuaial* for *san · ti ϑurial,* whereas Bücheler's *śin · ti ϑurial* was almost perfectly correct.

[21] Not "from left to right," as stated by Conway (I, 96).

[22] Conway, I, 96, No. 99.

[23] Planta, II, 528 n.

As to Conway's statement that three of the words are indisputably Oscan, I may say: The word *vinuχs* could not be Oscan, for in that case we should have **vinnus(s)* or **viínus(s)* (compare *Viínikiís*), not *vinuχs;* it could not be Latin, for the Latin has *vindex*. Similarly, *viniceu* cannot be Oscan, for in Oscan it would be **vinnikiúí* or **viínikiúí* (compare *Viínikiís*); and it could not be Latin, for the Latin form is *Vindiciō*. *Veneles* cannot be Oscan, for the Oscan form would be **Veneleís*. *per* is not Oscan, the Oscan form of this preposition being *pert*. So far as form is concerned, *aciam* could be Etruscan, Oscan, or Latin. Etruscan *tetet* (deˋdēd) corresponds to Oscan *deded* and vulgar Latin *dede,* but the word could not be written with *t* in either Oscan or Latin. *Venilei* could be Etruscan, Latin, or Oscan, so far as the ending is concerned, but the corresponding Latin word has *a* (*LS*. 14). But the whole text is perfectly clear and regular so soon as we recognize that it is Etruscan and that Etruscan is *Q*-Italic.

Vinuχs Veneles per aciam tetet Venilei viniciiu
(ˋ.winnucs ˋ.wēnēlēs .per .acˋcyām .deˋdēd ˋ.wēnīlei .winnicˋyō)

'The liberator of Venel gave [this vase] in accordance with legal procedure to Venel on his liberation'

vinuχs (.winnucs), 'liberator,' 'manumitter,' Latin *vindex,* 'one who lays legal claim to a thing, a claimant; a maintainer, defender, deliverer, liberator, etc.' Walde accepts Schrader's explanation[24] of *vindico* as from **venio-,* Irish *fine,* 'sept' or 'clan,' and *dīco* < **deicō,* 'announce,' 'speak,' with the earlier meaning 'point out,' 'designate,' still seen in δείκνυμι, *indico,* etc.: "**veni-dic-s* bezeichnet einen 'der auf die Familie hinweist,' etwa vor dem Könige, dessen Amt vielleicht schon in der Urzeit ein Schiedrichterliches war." So Walde. Schrader had said: "das lat. *vindex* . . . . ist ein echtes Kompositum, aus **veni-deics* entstanden und bezeichnet einen," etc. Walde also adds: "Für die Entwicklung von *vindex* aus **vendex* wäre aber die lautliche Berechtigung noch zu erweisen." All this is cleared up by the Etruscan *vinuχs,* from which we also learn that Latin *vindex* is, in all probability, an adaptation of the Etruscan word, and the Latin legal procedure of the Etruscan legal procedure. Schrader was evidently right so far as the first member of the compound is concerned, but as evidently wrong so far as the second is concerned. For Etruscan *vinuχs* reveals, not *deic-:* Old-Latin **deicō,* Latin *dīco,* 'say,' *dico,* 'announce,' Gothic *ga-teihan,* 'announce,' Old-German *zīhan,* 'charge,' *zeigōn,* 'point out'; but *deuc-:* Old-Latin *doucō,* Latin *dūco,* Gothic *tiuhan,* Old-German *ziohan,* German *ziehen,* 'draw,' 'drag,' 'lead.' That is, we have to do with an old **ven-deucō/*ven-dūco,* 'drag before (the court) of the clan.' The same root is found in German *Zeuge,* 'witness,' *zeugen,* Old-German *gi-ziugōn,* 'to bear witness,' literally 'zur Gerichtsverhandlung gezogen werden'; see *Zeuge* in Kluge.

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[24] Schrader, *Reallexicon,* 224 ff.

The normal phonetic development in Etruscan was our *vinuχs* (.winnucs), from **wen-dūcs;* compare *Vinucenas,* below. But in oblique cases and derivatives having *i* or *i̯* in the ending we may expect to find the *u* mutated to *ü,* later *i*; compare *viniciiu* (.winnic`yō < *windicyō < *win-duc-iōi), below. Furthermore, this mutation might pass by analogy to the nominative and other forms, where mutation was not justified (compare *simul* for *semul* by analogy to *similis* mutated from *semelis*). Thus there could arise in Etruscan a nominative .win-dics from the genitive .win-dices, and it is more than likely that such forms were the origin of Latin *vindex, vindicis,* with *-ex* rather than *-ix* under the influence of *judex, judicis; fex, ficis,* etc.[25] It should, however, be observed that it is possible that Latin *vindex* got its *-dex* for *-dux* by analogy to the associated legal term *judex,* or by other confusion of *deicō with *deucō; compare the like German confusion of *zeigen* with *zeugen* (see *Zeuge* in the new Weigand). For *nn < nd,* see *ścuna,* **19**.10.

Veneles (`wēnēlēs), the genitive of *Venel* (.wēnēl), *CIE.* 5006, a name frequently given a slave,[26] particularly in Orvieto. By origin it is no other than the adjective-substantive *vēnēlis (Brugmann, II, 369 β), corresponding to Latin *vēnālis,* 'purchasable,' 'slave.' For the preservation of the *-l-* in Etruscan, see § 67; for loss of *-is,* § 83. The dative is *Vēnīlei,* below, with which compare the early genitive *Venileis* (Conway, I, 97). Compare also the later analogical genitive *Vēnēlus* (*CIE.* 5021, *infra*).

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[25] Sommer, p. 143, A 1.

[26] Compare the British slang use of 'slavey' as a general name for a household servant.

per, 'in accordance with,' Latin *per;* observe also *peraś* (19.6) < .per-rārās, and *φericaru* (.periˋcāro), Latin *percarus,* F. 2343; *EEI.,* 9. For the weak form of the preposition, see *par* (.pər), Ga. 799, last line.

aciam (.acˋcyām) is the accusative of ˋaccya or .accyā < .actiā-, 'legal process or formality,' 'caerimonia.' Thus the Etruscan *per aciam* is equivalent to Umbrian *ahtim-em* and *ahtis-per.* It is interesting to observe that Umbrian, Etruscan, and Latin have different suffixes for this word. Thus, while Umbrian has the simple *ac-ti-,* Etruscan has *ac-ti-ā-,* and Latin has *ac-ti-ōn-;* see Buck, § 247, 1*a.* The retention of final *-m,* and of the *-i-* before *-ām* (compare *Viniceu,* below), is very archaic.

tetet (.deˋdēd), 'gave,' Oscan *deded,* Old-Latin *dede*(*t*); also contracted *tet* (.dēd), 11.3; later *te-ce.* Observe that the stressed *-d-* was treated as though initial (§ 66), whereas the *-d-* of ˋdeded regularly became *-l-* in *telet* (.deled), 11.4, a difference that would seem to prove that the change of *-d-* to *-l-* was later than the Etruscan shift of stress (§ 38).

Venilei (.wēnīlei), 'to *Venel,*' dative of *Venel;* see *Veneles,* above. For *ī* < *ē,* see § 43, and compare Latin *dēlīnio* < .dẹlēniō; for *-ei,* later *-ī* (*Liśipiϑi,* 16), see § 53.

viniciiu or *viniceu* (.winnic(c)yō), dative singular of **vinice* (.winnicce) < *windicye < *wendūcyos, 'pertaining to manumission,' 'liberated,' the adjective preserved in Latin in *Vindicius* (the name of the slave, or rather freedman, who discovered the conspiracy to restore the Tarquins). Compare also *vindiciae,* 'a legal claim made in respect to a thing, whether as one's own property, or for its restoration to a free condition.' Etruscan **vinice,* Latin *vindicius,* then, originally meant as much as *libertus* or *libertinus;* and *venel,* like Latin *venalis,* meant 'a human being that might be bought or sold,' 'a slave,' 'servus,' while *venel vinice* = *venalis vindicius* strictly meant 'servus libertus,' or simply 'libertus,' 'liberated slave,' or 'freedman.' Here, however, we may not only regard *Venel* as the name of the slave, but *Venel *Vinice* as his full name after manumission, exactly like *Venel Vinucenas,* below. With this use of *vinice* as a proper name compare the like use of *vindicius* in Latin and of *viínikiís* (Conway, I, 60) in Oscan and of *freedman* in English. For the phonology of *viniceu,* see *vinucs,* above. Compare also *gens Vinicia,* and, without mutation, *Vinucia* (Conway, II, 590).

With this inscription it is well to compare F. 2049 and F. 2050, although these do not illustrate Capuan Etruscan.

F. 2049, "columella, ad Urbem veterem (Orvieto) effossa an. 1772." The writing is from right to left and shows the archaic form of *m.* For the corrected reading *Venelus* (not *Venerus*), see *CIE.* 5021.

Mi Venelus Vinucenas
(.mī ˋ·wēnēlōs .winnuc-nnas)
'This (is the tomb) of Venel Vinucenas'

mi, 'this,' see *Ame,* **19**, line 2.

Venelus (ˋ·wēnēlōs), secondary genitive of *Venel,* for earlier *Veneles.* The genitive ending *-ōs* belonged properly to *n*-stems, but occasionally was carried over to other stems (§ 85). In F. 2050: *Mi Venelusl,* we observe the addition of the supplementary genitive ending *-l* (.l̥) < .əl < -al < *ad,* and also the fact that the slave was not given a family name, hence probably had not been manumitted.

Vinucenas (.winnucə(n)nās < .winnucinˋnās),[27] a family name formed from *vinuχs* on the model of family names in -(*in*)*iā*. Compare the freedman's family name *Larϑiia* (.lārtyā), F. 2311, for ˋ·lātriā, from .lā(w)tris, Greek λάτϱις, 'servant,' Latin *latro,* 'hired man.'

CYPRIAN ETRUSCAN

14. There have recently come to light several inscriptions written in Cyprian syllabic writing, which, however, could not be made to read as Greek. Of these I have access only to the two at Oxford, which were found by Myres, and published by Meister in the *Proceedings of the Prussian Academy* (1911), I, 166 ff. These turn out to be early Etruscan curses and betray characteristic Etruscan phonological and morphological peculiarities.

One of the curses begins—

(*a*) *Vi-ti-le-ra nu ta-na mu-no-ti*
(.witiˋlēra .nu danˋnā munoˋtī)
Latin: *Uitilēna iam, damno multo*
'Now (you) bawd, I curse (you) heavily'

and ends—

(*b*) *To-u pa-ci-mi-ra nu ta-na mu-no-ti*
(.tou ˋ·pācimrā nu danˋnā munoˋtī)
Latin: *Tu pacifera iam, damno multo*
'Now you pimp, I curse (you) heavily'

The second curse ends with the statement that the writer has taken precautions that the curse may not revert upon him[28]—

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[27] A later form of the name (arising out of the ablative rather than the genitive) is *Vinacna* (.winnəcˋnā < .winducin(n)yā), F. 5305.

[28] Compare the Duenos Inscription (*ne med mano statod*). I shall elsewhere consider the Duenos Inscription in the light of the simultaneous existence of Latin

(*c*) *Ta-ra-vi ca-va-li-ya ma-na mi/i*
(.tar`rāwi `.qālyā .ma`nā .mī)
Latin: *Tardāu̯ī qu̯ālia mala mī*
'I have prevented such evils for myself'

vi-ti-le-ra (.witi`lērā), 'bawd,' 'pimp,' Latin *uitilēna.* We expect *l* to become *n* unless inhibited by a neighboring *n* (§ 67) ; here, however, this neighboring *n* itself changed to *r.*

nu, both in (*a*) and (*b*), is written without the usual punct that separates a word from what precedes; hence it is an enclitic particle, Greek νῦν or δή, Latin *iam*—not the temporal adverb *nunc,* 'now.'

ta-na (.dan`nā), 'I curse,' from *dam`nā (§ 40) < *damnō. In Etruscan the *-ō* of the first conjugation regularly becomes *-ā* by analogy to the *-ās, -āt* of the second and third persons. It is probable that this change took place after final *-m* became silent, and so was really due to the *-a*(*m*), *-as, -at* of the Etruscan forms corresponding to Latin *-bam, -bas, -bat.*

mu-no-ti (.munətī), 'heavily,' 'severely,' from *mulətī (§ 67), whence also Latin **multī,* corresponding to *multo* as *magnī* does to *magnō,* and *tantī* to *tantō.*

to-u (.tou), 'you,' from .tū, Latin *tū,* but with the vocalism of the possessive adjective, Latin *tuus,* earlier *tou̯os, Homeric τε(ϝ)óς, 'your.'

pa-ci-m(*i*)*-ra* (`.pācimrā), 'bawd,' from *pācibherā, Latin *pācifera,* 'peacemaker.' The development of the meaning was: (1) a go-between who reconciles contending parties; (2) a go-between who arranges a matter of business or intrigue for two parties who cannot meet; (3) a pander. The same development is found not only in English *go-between* but also in French *entremetteur,* 'mediator,' *entremetteuse,* 'procuress,' etc. This also renders the derivation of *lēna,* 'bawd,' from *lēnia,* 'pacify,' exceedingly probable. The loss of weak *e* in *paciƀ(e)rā/.pācimrā is regular (§ 46). The change of *ƀr* to *mr* is the counterpart of the change of *mr* to *fr* in *fracēs, hībernus,* etc. The writing of *pa-ci-m*(*i*)*-ra* for *pacimra* is characteristic of Cyprian syllabic writing; compare *c*(*a*)*-va-li-ya,* below.

ta-ra-vi (.tar`rāwī), 'I have prevented,' from *tardāvī, Latin *tardāvī,* 'I have delayed,' 'I have prevented.'

c(*a*)*-va-li-ya* (.qālyā or .cwālyā), 'such,' Latin *qualia.* For *l,* see § 67.3; for *-ā,* § 41; for the spelling *ca-va-* for *cva-,* and *i-ya* for *ya,* see *pa-ci-mi-ra,* above.

ma-na (.ma`nā), 'evils,' from .malā (§ 67), Latin *mala,* 'evils.' Cp. *mu-no-ti.*

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and Etruscan in the city of Rome. [A blank reference but I think he meant: *mano* < *malō.* Cp. *ϝeked en manom,* 'made it against a bad man.' See § 67.—F. A.]

mi/i (.mī), 'for me,' Latin *mi*. *mi/i* is typical syllabic cumulative spelling (*A*. 20).

Verbs of the first conjugation with *-ā* for *-ō* appear most frequently in curses and dedications.[29] For example, in the Monte Pitti Curse[30] we find

inpa ϑapicu-n
(.inˋpā ˋ.tābbicǭ)
Latin: *impio tabifico-que*
'I execrate and cause to decay'

and

luu ϑapicu-n
(.luō .tābbicǭ)
'I cause to dissolve and decay'

inpa (.inˋpā), 'execrate' < *.enˋpyō, Latin *impio,* 'render impious'; compare Latin *exsecro*(*r*), 'execrate,' originally 'render not sacred.'

ϑapicu (.tābbicǭ or .tāppicǭ), 'cause to decay' < *tābificā < .tābificō, cp. Latin *tabificus* and Late-Latin *tabifico*. It is evident that the change of unaccented *-ā* to *-ǭ* (§ 41) was later than the change of *-o, -as, -at* to *-a, -as, -at*. For loss of *i,* see § 48.

-n (.n), 'and,' is the last vestige of weak *em* (§ 100).

luu (.luō), 'cause to decay,' compare Greek λύω, 'resolve a thing into its parts,' 'break down,' 'destroy,' and Latin *lues* = *tabes*.

Similarly in inscriptions on votive offerings—

M Aiflna sta mi (F.III 417)
'I, Marce Aiflna, dedicate this'

Mi cupe sta (F.III 406)
'I dedicate this cup'

Mi putere sta S Kaisies (F. 2261)
'I Sethre Kaisies dedicate this jar'

Limurce sta pruχum (F. 2754*a*)
'I Limurce dedicate the pitcher'

Pauli was, of course, right in recognizing in *cupe, putere, prucum* Etruscan adaptations of Greek κύπη, ποτήριον, πρόχους. But he was in error in rendering *sta* 'dedicat,' as he should have seen from *Mi cupe sta* above. He did see that it would be absurd to interpret the inscription as in third person without the name of the giver; so he added dots, giving the reader the impression that the inscription was incomplete and the name broken away or erased in some way or other. But in refuting Corssen and Deecke, who took *sta* as short for Statius, Pauli said there was plenty of room to write the full name if the engraver had wished to, the inscription taking up less than half of the space (see Corssen, I, plate 23 B).

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[29] Pauli, *ES.*, III, 53 ff. Torp, *EB.*, I, 20.

[30] Torp, *EB.*, II, 112 ff; *Venetische Inschrift von Lemnos,* 63 ff.

FALISCAN ETRUSCAN

15. *CIE.* 8413

This is a sacrificial bowl excavated from a tomb in the territory of the Faliscans. "Sepulcretum *di Monte Cerreto,* a Colle *di Narce* .... inter alias vasculorum testas parvus calix .... ex argilla nigrescente erutus est."

Mi aliqu Aχvile Siales pura ϑevsi-alϑia
(.mī .aliˋgō ˋ·aqille .siaˋlēs ˋ·pūrā ˋ·teusialtyǭ)

'This I pledge, Aquillius (son) of Sallius, an immaculate sacrificial bowl'

Inpein mlerusi ateri mlaχuta
(.inˋpeiŋ .ṃleˋrōsī ˋ·āterī .mlac(ə)ˋtā)
'Paint with a slip of moderate black'

Ziχuce mlaχta Ana zinace
(ˋ·stīgǭcē .mlacˋtā .anˋnā .stiˋnācē)

'Anna inscribed (and) decorated the slip (or surface)'

The text differs from what is usual in such cases in that it includes in its middle sentence a memorandum of the instruction given by Aquillius to Anna the artist, or by the dealer to Anna his workman.

mi (.mī), 'this' (see *Ame,* **19,** line 2).

aliqu (.aligō), 'pledge,' 'bind one (a divinity) to the performance of a request or prayer by presenting a gift,' 'to make a vow or pledge and present a gift to bind it.' Etruscan .aligo corresponds exactly to Latin *adigo,* 'put on oath,' 'bind by an oath.' For *g* spelled *q,* compare *equ* = *ego* (*CIL.,* X, 8336).

Aχvile (ˋ·aqille or ˋ·acwille), Latin *Aqüillius* (Schulze, p. 234). For .q or .cw, see *χue,* **12** above. Compare *Aelχe,* **1.**

Siales (.sialēs), genitive of .siale < Śalie, Latin *Sal(l)ius* (Schulze, p. 224). For metathesis, see § 33; for *-ēs,* § 85.

pura (.pūrā), 'immaculate' < *puram. For *-rā,* see § 41. It may be that *pura* here means (as also in Latin) 'unadorned,' 'unornamented,' 'plain,' 'without figures.'

ϑevsialϑia (.teusialtyǭ), 'sacrificial bowl.' The first part of this word evidently is from *ϑευσια, a by-form of ϑυσία, 'sacrifice'; compare φεῦξις by the side of φύξις, 'flight' (Brugmann, II, 432). It must be borne in mind that the Etruscan ϑ has a different function from the Greek ϑ (§ 20). The second part of our compound is from .altiām, being the *yo*-derivative (Brugmann, II, 193) of *altos,* 'high,' and agreeing with *ara*(*m*) understood. The like sacrificial bowl also "a colle di Narce" has the inscription **APA** = *ara. altia ārā* then meant 'the top of the altar,' 'the bowl or pan in which the burnt sacrifice was placed and burnt,' 'der Aufsatz auf dem Opfertisch'; but the term could be abbreviated to *altia* or *ara.* By metathesis the Etruscan *altia ara* became *altaria* in Latin, where it was felt to be a neuter plural, for which corresponding singulars (*altare, altar, altarium*) were formed in post-classical times, the meaning of the word having shifted to that of *ara.* Hitherto the origin of Latin *altaria* has been a puzzle. This is but one of the many cases in which Etruscan throws welcome light on Latin.

inpein (.inˋpeiŋ), 'paint' < .en + .peiŋge, Latin *pinge,* 'paint.' The original meaning of *peiŋg was 'prick,' 'tattoo' (see Walde, *pingo*). For *in-,* compare Latin *induco,* 'paint.' The occurrence of the grade *ei* by the side of the present *n* is interesting.

mlerusi (.mlerōsī), 'of moderate,' genitive of .moderōsom, Latin *moderātum.* For loss of *o,* see § 38; for *l < d,* § 66; for *-ī,* § 85.

ateri, 'of black,' genitive of *ātr̥ < *ātrom, Latin *atrum,* 'black'; here used as a noun, like *album,* etc.

mlaχuta (.mlac(ə)tā), 'with a slip' or 'coat,' that is, 'a semifluid clay for coating earthenware,' from the feminine of Greek μαλακτός, 'that can be softened.' Compare μαλακτικός, 'emollient'; μάλαγμα, 'emollient,' 'poultice'; μαλάσσω, 'soften (metal or other material) for working.' Compare *mlaχta,* below.

ziχuχe (.stīgǭcē) 'inscribed,' a *ce*-perfect (§ 10) corresponding to the Latin *ui*-perfect *stīgāvit,* from *stīgō,* 'prick,' in *instīgo,* 'spur on,' 'incite.' Compare στίζω, 'tattoo,' 'brand'; στιγμή, 'prick,' 'mark made by a pointed instrument,' 'period.' For the semantics, compare Middle-German *ritzen,* 'scratch,' 'wound,' Old-German *rîʒan,* 'tear,' 'inscribe,' 'write' = English *write;* also Walde, *scribo.* For *u* = *ǭ,* see § 25. The meaning 'scripsit' was determined by the combinative method; see Herbig in *Glotta* (1912), IV, 167.

mlaχta (.mlacˋtā), 'the slip' or 'the surface,' from .malactām; see *mlaχuta,* above.

Ana (.anˋna), the family name 'Anna'; see Schulze, pp. 345 f.

zinace (.stiˋnācē), 'engraved' or 'decorated' < .stilā-, verbal form corresponding to .stīgǭ-cē, above, a denominative verb from .stil(os), 'sharp-pointed tool,' 'stylus,' and probably 'graver,' Latin *stilus;* compare *caelo,* 'engrave,' from *caelum,* 'graver.' I am not absolutely sure of the distinction between the meanings of *ziχuχe* and *zinace*. Here we have both. *ziχuχ*e is found in various places (including the last line of the Perusian Cippus, 19) where it seems to mean 'inscribed' or 'scripsit.' *zinace* is found in *CIE*. 8415, with *mi qutum*, 'this cothon,' as object, where it seems to mean 'engraved' or 'decorated.' The jug has elaborate decoration as well as two inscriptions. For *n* from *l*, see § 67.

ETRUSCAN OF CAERE

16. F. 2404 and Plate 43

This archaic inscription is on a poculum found at Caere. The letters *m*, *ϑ*, *h*, and *q* all have archaic form, and the phonology, too, betrays the age of the writing. It will be observed, however, that the dative *-ei* (*Venilei*, 13) < *-ai* had passed on to *-ī* in *Liśipiϑi*, Latin *Lesbidi;* and that the *-d* of *sie*(*d*) had already become silent (§ 63).

Mi niceϑu mamima ϑumarvm
(.mī .nic(ə)ˋtō .maˋmīma ˋ·dōmārōm

'This I give to the most pure and true Artemis as a

Liśipiϑi purenai eϑ verai. Śie
.lis(ə)biˋdī ˋ·pūrənai .et ˋ·wērai. .siˋē

reminder of gifts (already made). May it be a

epanamina-ϑ unaśta vhelequ.
.epanamˋmīnat .unəsˋtā ˋ·ḥ̤ēlecū)

reminder and a final pledge.'

mi (.mī), 'this' (see *Ame*, 19, line 2).

niceϑu (.nic(ə)ˋtō), 'pledge,' 'give as a pledge,' 'present to a divinity so as to put him under obligation to help the giver'; Latin *necto*, 'bind,' 'bind by an obligation.' The *i* of the Etruscan form may perhaps have arisen by *i*-mutation in forms like *nectis*. The *e* between *c* and *ϑ* probably represents the distinct explosion of the first stop-consonant. Later, *ct* became *cc*. It seems less likely that Etruscan *niceϑu* represents Latin *nicto*, 'wink,' with the development 'wink,' 'assent,' 'grant,' 'give.'

mamima (.məˋmīma), 'reminder,' Greek μνῆμα, 'remembrance,' 'memorial.' For *m–m–m* < *m–n–m*, see § 33; for *ī* or *ẹ̄*, § 43. Compare *epanamina*, below. The Doric μναμα appears in Etruscan in the contracted *mā* (*CIE*. 101) with the meaning 'monument.'

ϑumarvm (ˋ·dōmārōm < ˋ·dōnārọ̄m), early genitive plural of .dōna, feminine mate of Latin *dōnum*, 'gift,' 'offering.' For *m–r* < *n–r*, see § 33; with *-arvm* compare *-urum* in *cerurum* (.cērōrōm, Latin *cereorum*), 'of wax tapers' (*CIE.* 4116), and contrast the later *aisaru* (ˋ.aisərō < .aisərōm), 'of the gods' (F. 2345, *EEI.*, 15). For *ō,* see § 50.

Liśipiϑi (.lis(ə)biˋdī), 'to the Lesbian,' Latin *Lesbidī,* dative of *Lesbis,* Λεσβίς, 'Lesbian woman.' The reference is evidently to the virgin-goddess Artemis, whose cult on Lesbos was famous.[31]

purenai (ˋ.pūrənai < *.pūrəmai), dative singular of the *mmo*-superlative of **puros,* 'pure'; compare Old-Latin *pūrimē.* For *n* < *m,* see § 33.

eϑ (.et), 'and.'

verai (ˋ.wērai), 'true,' Latin *vērae.*

śie (.siˋē < .siˋēd < *.s(i)i̯ēt), 'may it be,' Old-Latin *sied,* Latin *sit.* See Sommer, pp. 273, 489, and compare *dēsiēm.*

epanamina (.epanamˋmīna < .epanamˋnīma), 'reminder,' Greek *ἐπαναμνῆμα, which is to the verb ἐπαναμιμνήσκω, 'remind,' as μνῆμα is to μιμνήσκω. For *n-mnı-n* < *n-mn-m,* see § 33; for *ī* < *ē,* § 43; compare *mamima,* above. Treated as a feminine in Etruscan.

-ϑ (.t) < *eϑ* (.et), 'and.'

unasta (.unəsˋtā < *.ulistā), 'last,' 'final,' and *isto*-superlative corresponding to the *tmmo*-superlative seen in Latin *ultimus.* For *n* < *l,* see § 67; for ə < *i,* § 38.

vhelequ (ˋ.h̤ēlecū < .h̤ēlicūa < h̤elūcia < .bheidūcia), 'pledge,' that is, 'a gift that obligated the receiver, not the giver'; Latin *fiducia,* 'trust,' 'fidelity,' 'pledge.' For *vh* (*h̤*), see § 57; for *ē* < *ei,* § 52; for *l* < *d,* § 66; for *e* or ə < *i,* § 38; for *i–ū* < *ū–i,* § 33.

It is evident that the person who presented the poculum to Artemis had made her previous gifts without obtaining her (or his) wish, and that she (or he) now presents this gift, reminding the goddess of the previous gifts and of her failure to respond to them, and intimates that this is the last time that appeal will be made to her.

17. F. 296 *ter* b

Inscription on the bottom of a cup found at Cosa

Mi Lareceś śupelneξ ϑrfna
(.mī .lareˋgēs ˋ.supelnecs .tr̥bnā)

'This (is) Largus' top-shaped vessel'

mi, 'this,' see *Ame,* **19**, line 2.

Lareceś (.laregēs), genitive of *Larce* (.large), F. 1208, 1210, etc. < .lar(e)gos < .lasigos, Latin *largus,* 'plentiful,' 'bounteous,' 'largus.' *ś* for *s* shows the northern usage (*LS.*), which extends as far south as Cosa.

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[31] Gruppe, *Griechiesche Mythologie,* I, 298.

śupelneξ, 'vessel,' whence Latin *supellex,* which in classical times was used as a collective term for 'household utensils, furniture, apparatus.' The etymology of the word is made clear for the first time by its Etruscan form. It is obviously from **super-necto,* 'bind over,' 'cover with network,' so called with reference to earthen vessels protected by a network of osier or cord, such as are still in use in many parts of the world; compare Greek πυτίνη, 'a flask covered with plaited osier, like Florence oil flasks.' The semantics: 'plaited ware,' 'vessels' in general, 'household utensils,' 'furniture,' is paralleled by that of *vas, vasa,* 'vessel, dish,' also 'utensil' or 'implement' of any kind, 'military equipment,' 'luggage.' Compare our *pots and pans* in the sense of 'household appliances,' 'outfit,' one's 'things.' The collective use of the singular *supellex* is natural; it is like our *glassware, wicker work,* etc. ('things made out of glass, wicker,' etc.), and German *Schuhwerk,* 'shoes.' Compare Latin *instrumentum,* 'implement, tool, instrument,' also collectively 'instruments,' 'apparatus,' 'furniture,' also Latin and English *apparatus,* and English *furniture, equipment, outfit,* and the like. As Latin *rn* regularly remains intact (for example, *supernus*), we see that *supellex* is not a native Latin word but was in all probability derived from the Etruscan, with the regular Latin change of *ln* to *ll,* as in *collis* from *colnis* (Sommer, § 131).

ϑrfna (.tr̥f`nā or .tr̥b`nā) = Latin *turbinea,* 'shaped like a top,' 'cone-shaped.' Possibly the Etruscan word means rather 'formed on a potter's wheel' in contrast to the earlier method of shaping vessels wholly by hand.

This inscription is important chiefly in that by means of it we are for the first time in a position to determine the value of the character ⊞ found in some of the oldest West-Greek alphabets in the place of the Eastern ⌶. It is most natural to regard ⌶ as a simplification of ⊞ (much as **H** is a simplification of ⊟) and to assume that ⊞ had the value of ⌶, namely *cs.* But, because of the presence of the simpler form + or **X** toward the end of the alphabets having ⊞ in the place of Ξ, it has generally been assumed that the letter ⊞, although occupying the place of Ξ, could not have the value *cs,* which belonged to + or **X** at a later date, when ⊞ had disappeared from the alphabet. Our inscription appears to represent a transition period when the more original ⊞ and its simplification + existed side by side in the alphabet and with the same value, much as **K** and its apparent simplification **<** (later **C**) did. See also *ECG.,* § 13 ff.

It will be noticed that this old inscription contains several cursive forms mixed in with the more formal letters. Observe the round **C** by the side of the angular 8, the very cursive ϑ, and particularly the two-stroke **II** = **E** (so well known in Latin) in the same inscription with three formal **E**'s.

PERUSIAN EPITAPH, *T&H.* No. 17

18. Before introducing the text on the famous Perusian Cippus (**19**), I may well present a far older text also from Perugia. It is an epitaph inscribed on a peculiar small, roundish piece of tufa. It is too small to be a tombstone and does not contain the data that a tombstone would, but such a sentiment as might be placed on a tombstone. We must not take it too literally, as necessarily implying interment. It may have been placed in or on a grave; still, it is not impossible that it was placed on a funeral pyre or in a cinerary urn. In much the same way, we contrariwise sometimes speak of the ashes of the dead when we know that the body was interred and not cremated. The edges of our little stone are broken off in various places, or blistered, as by the heat of fire. Fortunately the cleavage usually follows the cuts that form the lines of the inscribed letters, so that the characters can be made out without much trouble. The text is very archaic; observe especially the retention of the *l* in *pvele,* Latin *puella.*

Mi pvele iśmu
(.mī .pwelˋlę̄ .īśmǭ)

'These (are) the remains of (my) wife'

Eule punϑlai ruχiaee uśa laśa
(ˋ.eule .puntlai .rogˋyai .ośā .laśā)

'Rest in the sepulchral depths (your) weary bones'

mi, 'this,' see *Ame,* **19**, line 2.

pvele (.pwelˋlę̄ < .pwelˋlai), genitive of .pwelˋlā (.powelˋlā), later *puia,* 'wife,' Latin *puella,* 'girl,' 'sweetheart,' 'young wife.' See *puil,* **3.**

iśmu (.īsmǭ < *insmā), 'remains,' plural of *īsmom, Latin *īmum,* 'the last,' 'the end.' The *-u* betrays *-ǭ* (§ 41), the *-ǭ* betrays lack of stress, this betrays a long vowel in the first syllable (§ 37) while *s* still existed, this shows that the length of the *ī* in Latin *īmum* is not due to the loss of *-s-,* which in turn throws light on the much-disputed etymology of the word.

eule < .eude, 'rest' (transitive) < Greek εὗδε, 'sleep,' 'rest' (intransitive). *eu* (§ 54) and the persistence of final *-e* (§ 47) are very archaic features. For *l* < *d,* see § 66.

punϑlai (.puntˋlai), locative of .puntˋlā, 'depths,' an *ā*-stem adaptation of .putmenˋnā, Greek πυθμένια, plural of πυθμένιον, 'bottom,' 'foundation.' For *-na* < *-ya,* see § 34; for .putmenˋnā > .puntˋnā, § 35; for .puntˋnā > .puntˋlā, § 33.

ruχiaee (.rogˋyaẹ), 'pertaining to the pyre or grave,' 'sepulchral'; compare Latin *rogus,* 'funeral pile,' 'grave.' For the retention of *y,* see § 34, n. 2. *-ae* and the *-ai* of *punϑlai* are practically the same (§ 52). The double *-ee* may imply *-ẹ̄ < -ī,* that is, locative *-ā-ī,* while the genitive *pvele* has *-ę̄ < -ai <* locative *-ā-i* (*ibid.*).

uśa (.oˋśā = Latin *ossa,* 'bones.'

laśa (.laˋśā), Latin *lassa,* 'weary.' For Etruscan *ś* = Latin *ss < st, dt,* see § 63. For stressed *-ā* by the side of unstressed *-ǭ* in *ismo* above, see § 41.

THE PERUSIAN CIPPUS[32]

19. The inscription on the cippus is a crude ritual intended for a sacrifice and banquet, for which funds were evidently left by Aule Veltina (Aulus Voltinius) and Lart Afuna (Lars Afinius). The ritual consists of the words to be spoken by the priest and the responses made by the spirit of the dead, interlarded with directions to the priest or his assistant as to what he was to do. The text covers one face of the stone and one side, consisting of twenty-four full lines and twenty-one very short ones. I here present about half of what is on the face of the stone, or one-third of the whole.

The text on the Perusian Cippus is considerably younger than the texts of the preceding inscriptions, but it is decidedly older than the text of the Mummy Manuscript (No. **21**).

1.	Eurat tanna lare zul.	ˋeu̯rād dannā lāre stol.
2.	Ame vaχr lautn Velϑinaś e-	ame wacr̥ lau̯tn̥ weltinˋnās
3.	śt-la Afunaś. Sleleϑ caru	est-lə afənˋnās. ˋslēlēd cārǭ
4.	teza-n fuśleri tesnś teiś	tesˋtā-n fuslərī teśn̥s dēīs
5.	Raśneś. Ipa ama hen naper	rasˋnēs. iˋpā amā hen ˋnaper
6.	XII. Velϑina, ϑuraś araś pe-	du ˋmealcl̥s-c. weltiˋnā, doˋrās ārās
7.	raś cemul-m lescul. Zuci en-	perˋrās ˋcēmǭl-m̥ lēścǭl. tsucī
8.	esci epl tularu.	eˋnẹ̄ścī epl̥ tuləˋrō.
9.	Auleśi Velϑinaś Arznal cl-	ˋaulēsī weltinˋnās arsˋtnāl
10.	enśi ϑii ϑil ścuna cenu e-	glenˋsī ˋdīī dīl scunˋnā ˋcēnǭ
11.	plc felic Larϑalśs Afuneś.	epl̥c ˋfēlīc lartals afəˋnēs.

(1) 'May the laurel branch in burning consume the offerings.
(2) This is the stone cippus of Veltina (3) and Afuna:
Lest the good (4) pot injure the place of burning, let the Etruscans pray to the gods. (5) By means of this pail portion out twelve wild boars.
(6) Present, O Veltina, thy most excellent altar(s) (7) with food and sustenance!

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[32] F. 1914; *CIE.* 4538; Skutsch, *PW.*, 784.13 ff.

(8) I will at once provide a banquet of fatted swine.
(9) Serve the auspicious meal of Aule, (10) the divine son of Veltina (and) Arstnai, (11) and the auspicious feast of Lart, son of Afune.'

(1)*Eurat tanna lare zul.*
(.eurād .dan`nā .lāre .stol)
'May the laurel branch in burning consume the offerings.'

This sentence appears to have a sort of independence and may have been added as an afterthought in space originally intended to be left as a margin.

eurat (.eurād or -ǭd, § 41), Latin *ūrat* < *eusāt, 'let it burn.' Second person *euras,* F. 2301. The fact that we have *eu* in early Etruscan makes it clear that the change *eu* > *u* was not primitive Italic as usually held (Brugmann, *Grundriss,* I, 198; Buck, *O-U. Gr.,* § 70). See § 54.

tanna (.dan`nā), 'offerings,' Latin *damna* < *dapna, 'things given in requital,' 'fines,' 'losses'; see *daps,* 'sacrificial feast,' Old-Icelandic *tafn,* 'sacrificial victim,' 'food.'

lare (.lāre) < .laureos, Latin *laureus,* 'of laurel,' 'laurel' as an adjective. For *au/ā,* see Müller-Deecke, II, 370.

zul (.stol) < *̣stolo < *̣stolō (§ 50), 'shoot,' 'branch,' Latin *stolo,* 'scion,' 'sucker.' For *z* = *st,* see § 63. For the use of laurel branches in kindling fire and as a means of purification and of repelling evil spirits, see Gruppe, especially page 785, notes 1 and 2, and page 859, note 1.

(2)*Ame vaχr lautn Velϑinaś* (3)*eśtla Afunaś.*
(.ame .wacr̥ .lautn̥ weltin`nās .estlə .afən`nās)
'This is the stone cippus of Veltina and Afuna.'

ame (.ame), 'this' < *̣amos, Vedic *amaḥ,* 'this person,' 'he.' Here *am-* has *o*-inflection. It appears also with the post-positive locative-demonstrative adverbs *ī* and *ū*: Sanskrit *amí,* 'those,' *amú-tra,* 'there.' In Etruscan .amī regularly (§ 40) lost its weak initial *a-* and appears as the uninflected demonstrative *mi,* universally recognized as meaning 'this.' For locative-demonstrative *-ī,* see § 76.

vaχr (.wacr̥), 'cippus' < *̣wacerros, masculine mate of Latin *vacerra,* 'post.'

lautn (.lautn̥), '(of) cut stone' < *̣lautomos, 'made of cut stone' < Greek *λαϝοτομος seen in λᾱτόμος, 'stonecutter.'

Velϑinaś (.weltin`nās), 'of Velϑina.'

estla (.estlə) = *est,* 'is' + *-clə* (F. 2603 *bis*) < *-cle* (*CIE.* 4116) < *χve,* 'and' (Capuan Tablet); see *EEI.,* 15, also *-c* (§ 100).

Afunaś (.afən`nās), 'of Afuna,' genitive of *Af(u)na* (*CIE.* 4538.17), a family name, originally the ablative of *Afinia.* (See Schulze, *LE.,* 112.)

Sleleϑ caru (4)*teza-n fuśleri tesnś teiś* (5)*Raśneś.*
(.slēlēd .cārǭ .tes`tān .fusle`rī .teśn̥ś .`dēis .ras`nēs)

'Lest the dear pot injure the place of burning, let the Etruscan pray to the gods,' or 'Let the citizens pray the gods that the good pot may not do damage to the place of burning.'

sleleϑ (.slēlēd) < *slaidēt, 'may it injure,' the *ē*-subjunctive[33] = the Latin future *laedet*. For *ē* < *ai,* see § 52; for *l* < *d,* § 66.

caru (.cārǭ) < .cārā, 'dear' or 'good,' complimentary or euphemistic. For *ǭ* < *ā,* see § 41.

teza (.te`stā), 'pot,' Latin *testa,* 'earthen pot.' For *z* = *st,* see § 63.

-n < .ne, 'that not,' 'lest,' original use of the Latin interrogative *-ne.*

fuśleri (.fuslə`rī) < *bhustarai, dative of .fustar, Latin *bustar,* 'place to burn the dead.' Observe the Etruscan *f* = Latin *b* < *bh* also in the synonymous *fust,* Latin *bustum* (F. 2345; *EEI.,* 15 f.). For *sl* < *st,* see § 33. In some Etruscan inscriptions we still find the intermediate form *-ei* in the dative of consonant-stems.

tesnś (.teśn̥s) < *testens < *testent = Latin *testent*(*ur*), 'let (them) invoke.' For *-ns* < *-nt,* see § 65.

teiś (.dēis) < *dei̯u̯ois, Latin *dīs,* '(to) the gods.' *tesnś* here governs the dative, contrary to Latin usage.

Raśneś (.ras`nẹ̄s), 'Etruscans' < *ras`nais, a conglomerate of nominative .ras`nai and accusative .ras`nās, here used as a nominative. The meaning here may be practically 'citizens.' The form of the name .*Ras*(*e*)*n*`*nā,* for .Ras(e)niă, is due to oblique forms like the genitive *Rasnas* (= .Ras(e)n`nās), ablative .Ras(e)n`nā, etc. It is primarily an adjective agreeing with *tribus* understood, exactly like *Aemilia* (*tribus*), and, as in Latin, when applied to a person it stood in the ablative or the genitive. Such an ablative or genitive applied to an individual became his name. Thus, the name of 'Etruria' was .`Ras(e)niă, later .Ras(e)n`nā, genitive *Rasnas* (.ras(ən)`nās), later *Raśnal,* with the younger genitive ending *-al.* Compare *Rasnas marunuχ,* 'maro of Etruria' (F. 2335*b*), and *Tular Raśnal,* 'Boundary of Etruria' (F. 1044); cp. Umbrian *tuder,* 'boundary.' On the other hand the name of an individual 'Etruscan' was .Ras(e)n`nā, a masculine noun, though by origin the ablative of a feminine. See § 103. For *ē* < *ai* in the plural *Raśnes,* see *sleleϑ,* above.

Ipa ama hen naper (6)*XII.*
(.ipā .amā .hen .naper .*dus* .*mealcl̥sc*)

'By means of this pail portion out twelve wild boars.'

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[33] Sommer, § 342.

ipa (.iˋpā), 'this'; *i-*, 'this' + *-p-* in *ipse* and *quispiam,* with *-o/-a* inflection. Also *CIE.* 4116.

ama (.aˋmā), 'pail,' Latin (*h*)*ama,* 'fire bucket.'

hen (*h-* probably hiatus-bridge; *n* < *m* before *naper*) < *̣eme = Latin *eme,* imperative of *emo,* 'take,' 'buy,' from .n̥mō, 'portion out,' 'distribute'; cp. νέμω, 'deal out.' For -(*e*), see § 47.

naper (ˋ.naper), 'wild boars,' is related to Latin *aper,* 'wild boar,' and more closely to Umbrian *abrons* (.aprōns) < .aprōnes, whose gradation mate .aprenes became Etruscan .apren(e) > .apern > .naper. Etruscan *̣aprenes : Umbrian .aprōnes :: Latin *hominem* : Old-Latin *homōnem.*

XII. I have not observed the number 12 written out in words. We have, however, the number 11 written (*m*)*aχs mealχls-c,* 'one and ten,' or 'eleven' (F. 2340). According to this, 12 would be *ϑus mealχls-c,* 'two and ten.' See §§ 97, 98.

Velϑina, ϑuras araś (7)*peraś cemul-m lescul.*
(.weltinˋnā, .doˋrās .ārās .perˋrās .cēmǭl-ṃ .lēścǭl)

'Present, O Veltina, thy most excellent altar with food and sustenance!'

Velϑina (.weltinˋnā), 'Veltina,' family name, genitive *Velϑinaś* (line 2); compare Latin *Voltinia,* with regular shift of *e* to *o.*

ϑuraś (.doˋrās), 'present with,' 'give' < .doreˋās, the volitive subjunctive of the denominative verb *̣doreo, 'give,' 'present,' which is to δωϱέω as δοτήϱ is to δωτήϱ. That the Etruscan verb had a short *o* and is, therefore, not identical with δωϱέω, is shown by the frequent loss of the *o* in *ϑrce/trce* (.dr̥ˋcē) F. 2598, 2613, by the side of *turce* (.dorˋcē), F. 2603 *bis.*

araś (ˋ.ārās), Latin *ārās,* 'altars.' The Etruscan plural is here used as a singular, just as Latin *altāria* is.

peraś (.perˋrās), 'most excellent,' Latin *perrārās,* 'very rare,' 'unique.' Compare *φericaru* (.periˋcāro), 'very dear,' Latin *percarus* (*EEI.* See Appendix.).

cemul (ˋ.cēmǭl) < .cesnād, ablative of .cēnǭ < .cesnā, Latin *cēna,* 'meal,' 'course.' *m–l* by teleterosis of the dentals *n–l.* See *cenu* (line 10).

-m (.m), weakest form of *em,* also *um* (.*-m,* F. 2598), the frequent conjunction meaning 'and.' It is the same as Old-Latin *em,* 'then,' with the familiar change of 'then' to 'and'; compare Umbrian *enem,* 'then,' Oscan *inim,* 'and,' Latin *enim,* 'for' (compare German *denn,* 'for,' weak form of *dann,* 'then').

lescul (ˋ.lēścǭl), 'with food or sustenance' < .wēscād (= *vēs*(*i*)*cā*[*l*], F. 2301), parallels to Latin *ēscā,* ablative of *ēsca,* 'food'; compare Latin *vēscus,* 'eating greedily.' *l* < *w* is not rare; compare *leśc* (.lēśc), 'meal'

(20) < .wēscom, neuter mate of .wēscā; also *-ls-* < *-wēs-* in numerical adjectives (*EEI.*, 18), and *eśtla* < .est-qe (line 2).

Zuci (8)*enesci epl tularu.*
(.tsuˋcī .enēścī .epl̥ .tulərō)
'I will at once provide a banquet of fatted swine.'

Zuci (.tsuˋcī), later *śuci* (.śuˋcī), 'of swine,' 'of pork,' genitive of the noun of which Latin *suculus, sucula,* 'pig,' are diminutives. Etruscan *z* (.ts) shows that the word began with *ts-*, the syllable .tsuc being imitative of the sound made by the hog in swilling. In the light of this, observe the persistence of σ- in σῦς.

enesci (.eˋnēścī), 'fatted,' genitive of .eˋnēsce < .enescətos : Latin *inēscātus* :: *red-ditus* : *circum-dātus.*

epl (ˋ·epl̥), 'feast,' 'banquet' < .eplom, whence Latin *epulum.* The word has a very interesting development. We must start with Johannes Schmidt's **depinom* (compare δέπας, 'goblet,' 'bowl'), whence Old-English *tífr,* 'sacrificial victim.' But the Etruscans brought dialectic Greek forms to Italy, which have no initial δ and seem to have been influenced by ἐπιδορπίς, old name for δεῖπνον, etc. Thus, .epidom, in which the initial *d-* takes the place of the medial *-n-*, and .epinom, in which the *d-* is simply dropped. The latter became Etruscan **ep*(*i*)*nom* > *epn, CT.* 14. The former became **ep*(*i*)*lom* > *epl,* with regular change of medial *d* to *l.* It also is the basis of Latin *epulum,* 'banquet,' whose origin, naturally enough, has never been suspected.

tularu (.tuləˋro) = Latin *tulero,* 'I will (at once) procure' or 'provide,' or *sustulero,* 'I will (certainly) set up'; in either case a future perfect with the force of an emphatic future, as in early Latin.

(9)*Auleśi Velϑinaś Arznal* (10)*clenśi ϑii ϑil*
(ˋ·au̯lēsī .weltinˋnās .arsˋtnāl .glenˋsī .dīī .dīl
'Serve the auspicious meal of Aule, the divine son

ścuna cenu (11)*epl-c felic Larϑalś Afuneś.*
.scunˋnā ˋ·cēnǭ ˋ·epl̥c ˋ·fēlīc ˋ·lartals .afəˋnēs)
of Veltina (and) Arstnai, and the auspicious feast of Lart, son of Afune.'

Auleśi (ˋ·au̯lēsī), genitive of *Aule* (*CIE.* 1792), '*Aule,*' or '*Aulus,*' with double genitive ending (§ 85) = *Auleś* (*CIE.* 4116), with single ending.

Velϑinaś, see line 6.

Arznal (.arsˋnāl), genitive of **Arznai,* 'Arznai,' a feminine family name. See Schulze, p. 127.

clensi (.glenˋsī), genitive of *clan* (.glan), 'child,' 'son,' rarely 'daughter' (F. 501).[34] This word has special interest and importance. Its inflection is:

Singular

nom.	*clan*	(.glan)	F. 2056
gen.	*clenśi*	(.glenˋsī)	*CIE.* 4196
dat.	*clen*	(.glen)	F. 2613
acc.	**clan*	(.glan)	

Plural

nom.	**clenar*	(ˋ.glenər)	
gen.	*clenaraśi*	(.glenəˋrāsī)	*CIE.* 4116
dat.	**clenar-*		
acc.	*clenar*	(ˋ.glenər)	F. 2056

We must start with **genmen* (Sanskrit *jánman-,* 'birth'), which was dissimilated to **germen* in Latin and to .gelmen/.glemen in Etruscan. The -*n̥* of the nominative and accusative .glemn̥ changed the stem-vowel to -*a*- (§ 45) and this .glamn̥ was contracted to .glan (as *.neumn̥, Latin .nūmen, became *nūn,* F. 2400*d*). This loss of -*m*- in the nominative and accusative led to the change of *.glemen- to *.glenen-, which later was again dissimilated to .glenər-, written *clenar-*. As the nominative and accusative, the most used cases, had no -*ar* in the singular, it was dropped from the other cases of the singular too, and thus remained in the plural only. The old weak -ə (Latin -*a*) of the nominative and accusative plural of consonant-stems regularly disappeared. And thus arose the inflection .glan, .glen, .glen, .glan, plural .glenar, etc. This development is parallel with that which gave us German *Kind, Kinder, Kinde, Kind,* plural *Kinder,* etc., as also English *child,* plural *childer,* now *children* by analogy to *brethren.* Out of *clan,* 'son,' *clenar,* 'sons,' Etruscologists constructed the myth about an Etruscan plural ending -*ar,* supposed to be itself enough to prove Etruscan a non–Indo-European language! In Etruscan the genitive singular of *n*-stems regularly ended in -*s* (Brugmann, *Grundriss,* Vol. II, Part 2, § 145*b*), rather than -*es* or -*os.* We should, therefore, expect *clens* (.glens) as the genitive of *clan.*[35] This we find as a name *Clenś* (*CIE.* 4050); compare English *Child's* restaurant. The added -*ī* in *clensi* is from the *o*-stems (§ 85). The genitive plural *clenaraśi* has assumed the (double) ending -*ās*-*ī* that arose in *ā*-stems, both singular and plural.

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[34] Compare also *claniunia* (.glaniōnia), 'little daughter' (*CIE.* 1356), formed from *claniu* (.glanˋyō), 'little son' (*CIE.* 1355), who were brother and sister. Also *cles,* § 86 *bis,* footnote.

[35] There is also a dialectic *clan-l* (.glanl̥) formed from the nominative *clan* (*T&H.,* No. 55).

ϑii (.dīī or .dēī) < .dei(w)ī < .deiwei, 'of the divine.' This *ϑii* and the dative *ϑiu* (.dio) (Magliano, 4) probably have the first *i* = a very close *ē*, spelled *e* in *teiś* (line 4); compare *ϑil*, below.

ϑil (.dīl or .dēl), 'dedicate,' 'serve' < .dēle < (§ 66) .dēde = Latin *dēde*, 'give over,' 'dedicate.'

ścuna (.sconˋnā), 'propitious' < .secundām, Latin *secundam*. For *o*, see § 41; for *-nn-* < *-nd-*, § 34. For loss of vowel, see § 38.

cenus (ˋ.cēnǭ), 'meal' < .cesnām, Latin *cēnam*. See *cemul* (line 7).

epl (.epl), line 8.

-c (.c), weak form of *ce* < *χue*, Latin *que*, 'and'; see also *estla* (line 3).

felic (ˋ.fẹ̄līc), 'favorable,' 'auspicious,' Latin *fēlīx*. As we should expect **vēnīc* in Etruscan in place of *fēlīc* (§ 67), the word may represent an early adoption from the Latin. It will be observed that Etruscan retains the original neuter form and does not, like Latin, carry the masculine *-s* over into the neuter. Compare also the Novilara inscription (line 10), which has: *tenac anvś et* (.teˋnāc ˋ.aŋŋuś .et) = *tenax et angustum*. For *ē*, see § 43.

Larϑals (.lartals), 'of Lart.' For *-al-s*, see 86*b*.

Afuneś (.afəˋnēs), 'of Af(u)ne.' The nominative **Afne* (< **Afinios*, Latin *Afinius*) is the name of the father, the progenitor of the family *Af*(*u*)*na* or *Afnas*, by origin ablative and genitive of *Afinia* (*tribus*).

THE MAGLIANO TABLET, 4[36]

20. *leśc-em tnucasi śuriseis teiś*
(ˋ.lēśc-em .dnuˋcāsi .śoriˋseis .dēīs)
'and strew a meal of nuts for the gods'

Leśc (.lēśc) < *.lēscom, 'meal,' the neuter mate of .lēscǭ, 'food'; see *lescul* (19.7).

-em, 'and.' See § 100.

tnucasi (.dnuˋcāsī), 'of nuts,' genitive plural of .dnucs, Latin *nux*, by telemetathesis < *.cnud-; whence Germanic .hnut-, Old-English *hnut-u*, 'nut.' It was customary to strew nuts at the festival of Ceres and at weddings, much as we strew rice, as symbolic of productivity, but I am not aware that it is elsewhere spoken of as a meal for the gods.

śuriseis (.śoriˋseis), 'strew,' a volitive subjunctive, adapted from Greek στορέσῃς, aorist subjunctive of στόρνυμι, 'strew,' Latin *sterno*.

teis (.dēīs).

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[36] Skutsch, *PW.*, 785.45 ff. Deecke und Pauli, *Etruskische Forschungen und Studien* (1884), VI, v–x. Torp, *Etruscan Notes* (1905), pp. 4–19.

LATE EGYPTIAN ETRUSCAN

21. The Mummy Manuscript[37]

This, our only Etruscan manuscript, presents rather a late ritualistic text, which is, however, of great value, partly because of its length and partly because the many repetitions and variations help to fix the meaning of the words. The lateness of the text is shown partly by the phonology (for example, the change of *ts* to *ś*, *śuci,* line 1), the confusion of the letters *ś* and *s*,[38] and the peculiar interchange of the genitive endings.

a. *Iχ matam śuci-c firin Cereni Enaś* (7.22).

(.īc .maˋdām .śucī-c .firin .cereˋnī .enˋnās)

'Sacrifice the breast and uterus of a sow to Ceres of Enna.'

iχ (.īc), 'sacrifice' < .īce, compare the very early *icamus* (ˋīcāmos) 'let us strike' (F. 2346; *EEI.,* 15), *iχutevr* (*śuci,* below), and *iχ* at the end of the inscription on the Perusian Cippus. The word is the same as the *īcere,* 'strike,' of Early Latin. The change of 'strike' to 'sacrifice' is well known; compare Latin *caedo,* 'strike,' 'sacrifice,' etc.

matam (.maˋdām), 'breast' < *madˋmā < .madmām, accusative of .madmā, whence Latin *mamma,* 'breast.'

śuci (.śuˋcī), later form of *zuci* (19.7). The word was evidently masculine or neuter in form but could be used for 'sow' as well; so here and on the Magliano Tablet, line 3, where the udder of one is ordered to be sacrificed (*iχutevr,* ˋīcǫteur < .īcātor contaminated with .īcāter, Etruscan having the various passive endings found in Oscan-Umbrian).

firin (ˋfirin) 'uterus' < *firni(om) < *bherniom, 'that in which something is carried' = φέϱνιον, 'basket,' Umbrian locative *ferine* < *fernie, 'in a basket.'[39] For *f* < *bh,* see § 55.

Cereni (.cereˋnī) < .cererei, Latin *Cereri,* Oscan *Kerrí,* 'to Ceres.' For the relation of the sow to the Demeter cult, see Gruppe, p. 1178, n. 2.. The uninflected name appears both as *Cerer* (*Mu.,* 7.10) and as *Ceren* (*Mu.* 7.9).

Enaś (.enˋnās), '(daughter) of Enna,' that is, Enna the guardian deity of Enna, the ancient city of Sicily, with a famous temple of Ceres. *Enna* (Etruscan .enˋnā) is from *enyā, locative-ablative of 'Ελια; compare

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[37] Skutsch, "Etrusker," *PW.,* 777.35 ff.

[38] *Ibid.,* 779.51.

[39] Hitherto unexplained and regarded as a consonant-stem. See Buck, *O-U.G.,* § 178, n. 6, p. 236.

'Ελαία and 'Ενναία. Cyme and Myrin(n)a in northern Lydia make with Elaea, just to the north, a remarkable triad in connection with Myrinna in Etruscan Lemnos, Cymae in Italy, and Enna in Sicily. It is from the last place that Pluto is said to have carried off Persephone. Her rape is represented upon the coins of Enna and Elaea, as well as upon those of neighboring towns in Lydia and Caria.[40] All of which is very interesting in connection with the passing of the Etruscans from Lydia to the west. I may add that, according to the Mummy Manuscript (2.8, etc.), Ceres was "the very devout offspring of the very great and mighty Enna," that is, Enna is identified with Demeter, and Ceres with Κόρη, 'the daughter,' that is, Persephone. See ***e***, below.

The first unmutilated lines of the manuscript (2.5–8) are of extreme interest and importance. They recur again and again in the manuscript, so that there can be no doubt as to the reading.

b. (5)*Eϑrse* (6)*Tinśi Tiuri-m avilś χis;*
(ˋ·edr̥se ˋ·tīnsi .tiˋōrī ˋ·awils .cīs)
'Sacrifice five yearlings to Jupiter and Luna';

eϑrse (ˋ·edr̥se or ˋ·edr̥ze, 'sacrifice,' the Greek *ἐρζε (.erdze), classical ἔρδε, also ῥέζε (.redze).

Tinśi (.tinsi), dative of *Tinś,* 'Jupiter' (cp. **22**).

Tiuri (.tiˋōrī), dative of *Tivrs,* 'Luna' (see **25**).

-m, 'and.' See § 100.

avilś (.awils), 'years,' in the Mummy Manuscript and on the Magliano Tablet also 'yearlings.' On the Lemnos Stone we find *avis,* 'years,' accusative plural .aˋwīs (or ˋ·awīs) < .aiwins, Gothic *aiwins,* 'times.' The usual Etruscan *avils* is not this word but a *d*-derivative, the nominative plural *·aiwides, which is reflected also in the Greek *io*-adjective 'ᾱΐδιος, 'everlasting' < *·awidios < *·aiwidios, with *a–i* < *ai–i* by teleterosis, both in Etruscan and in Greek.[41] For Etruscan *-l-* < *-d-,* see § 66.

χis (.cīs) = adjective form of *ci,* 'five'; § 98.5.

This text is followed by one or the other of the two following sentences:

c. *cis-um pute tulϑans haϑe-c repine-c* (9.4–5)
(ˋ·cīsəm ˋ·potte .tolˋtāns ˋ·hattec .rēppinec)
'and let the serpents and reptiles devour five pulse cakes'

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[40] Gruppe, p. 1185, n. 5.

[41] [But cp. *aivils,* F. 90.—F. A.]

d. *cis-um pute tulϑansur haϑrϑi repinϑi-c* (2.6–7)
(ˋ.cīsəm ˋ.potte .tolˋtānsor ˋ.hattr̥di ˋ.rēppindic)
'and let five pulse cakes be devoured by the serpents and reptiles'

cis (.cīs), 'five.'

-um (.əm), 'and.'

pute (ˋ.potte), 'batches of pulse,' 'pulse cakes' < .poltes, plural nominative-accusative of the noun (Latin *puls*) whose genitive appears as *pulϑes* (.poltēs) or *puϑs* (.po(t)ts < .polt-s).

Tulϑans (.tolˋtāns < .tolltānt), 'let them devour,' volitive subjunctive of _*tol(l)to,_ intensive of Latin *tollo,* 'make away with,' 'kill'; compare πλέκω but Latin *plecto.* For *-ns* < *-nt,* see § 65.

tulϑansur (.tolˋtānsor) < .tollˋtāntor (under the influence of the active *tulϑans*), 'let them be devoured.' The phonetic distinction *-ns* but *-ntor* was retained in Umbrian. It may also have been intact in Etruscan at the time that Ga. 912 *bis* was written.[42]

haϑe (.hatte), 'adders,' 'serpents.' We find *haϑe* (*M.Ms.* 9.4, 12, 20), *hate* (4.4, 16), *hante* (3.23). The form *hante* is the older and is from .antre(s) < .natres, nominative plural of the word seen in Latin *natrix,* German *Natter,* and English *adder.* For the relation of serpent to the Demeter cult, see Gruppe, page 171. There can be no doubt that it was this relation that led to the Latin corruption of Persephone to Proserpina.

haϑrϑi (ˋ.hattr̥di), instrumental case in _*-bhis_ of *haϑe,* above. Compare *repinϑi,* below. For *bh* > *b* > *d,* see § 55.

repine (ˋ.rēppine), 'reptiles' < *.rēptiliə, Latin *reptilia,* 'reptiles,' with regular shift of *-l-* to *-n-* (§ 67).

repinϑi (ˋ.rēppindi), 'by the reptiles.' See *repine* and *haϑrϑi,* above.

These texts (*b, c, d*) are followed by the words given below, or by similar ones, stating that the serpents and reptiles referred to were those of Ceres the daughter of Enna (*a*):

e. *śacnicleri cilϑl śpureri meϑlumeri-c Enaś.* (9.21)
(ˋ.sācniclerī ˋ.giltl̥ spureˋrī .metlumeˋrīc .enˋnās)
'of the very pious child of the very exalted and great Enna.'

śacnicleri (.sacnicleˋrī), 'of the very[43] pious,' genitive of the comparative of *sacnicn* (.sācnicn̥) < *.sācricol(om), 'cultivating sacred things,'

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[42] Observe *aprueunetur* (.appro(w)ēən(ə)tor) = Latin *approbentur,* 'may they be approved of.' The preceding word, too, is an interesting *-or* verb: *purtisur* (.portisor), 'let (the proper person) carry' or 'let (it) be carried' (compare Oscan and Umbrian, Buck, § 238 f.), impersonal *-or* form of an *s*-aorist.

[43] See Delbrück, *Syntax,* I, § 196.

'pious'; compare Latin *sācricola,* 'sacrificial priest(ess).' For *n* < *r,* see § 33; for *n* < *l,* § 67.

cilϑl (.giltl̥) 'of the child' < *̣gint-al, genitive of .gilt < *̣genit < *̣genitom, 'child,' Latin *genitum,* 'begotten,' participle of *gigno,* 'beget'; compare *genitor,* 'parent,' 'father.' *cilϑl* is the regular form of the genitive when used with the positive and comparative of the adjective, while *cilϑs* is the form used with the superlative: for example, *śacnicla(l) cilϑl* (5.23), *śacnicleri cilϑl* (5.6), but *śacnicstreś cilϑś* (5.3). For the accusative, compare *śacnicn*[44] *cilϑ* (.sācnicn̥ .gilt) < *̣sācricol(o)m .genit(om), 'the pious child.'[45]

śpureri (.spureˋrī), 'of the very exalted,' genitive of the comparative of the adjective, early Latin *super* < *̣superos, classical Latin *superus,* 'higher,' 'upper.' As in Latin, the word was provided with comparative and superlative suffixes. The genitive of the comparative was *super-er-ī,* which, by telemetathesis, became .sepurerī, whence *spurerī* (*e* lost).[46] In Etruscan the genitive of the adjective came in time to have the same ending in all genders, as in the third Latin declension.

meϑlumeri (.metlumeˋrī), 'of the very great,' genitive of the comparative of *̣moltm̥mos, itself originally the superlative[47] of *̣moltos, Latin *multus,* 'great.' The early Etruscan .molt-em-er-ī became, by telemetathesis, .metlomeˋrī, written *meϑlumeri.*

Enaś (.enˋnās), see **a,** above.

In *Mu.* 9.1 (Torp, *EB.,* II, 68) we find:

f. *Hintu vinum, trau prucuna.*

(.(h)inˋtō ˋ.wīnum, .trau .procoˋnā)

'Pour out the wine, carry the pitcher on with you.'

hintu (.(h)inˋtō), 'pour out' < *̣iniˋtōd, Latin *initō(d),* 'let go in'; compare German *einschenken,* 'pour out.' The Etruscan, like the German, thought of the cup into which the wine or coffee is poured; we think of the bottle or coffee-pot from which it comes. The *h* is probably a hiatus bridge.

vinum (ˋ.wīnum), 'wine' < Latin *vinum;* see § 101.

trau (.trau or .trāw), 'carry along (with you)' < *̣trawehe, Latin *trāvehe.*

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[44] Also *śacnitn* (7.7), with teleterosis of *cn–cn* to *cn–tn.*

[45] [References are to other passages of the Mummy Manuscript.]

[46] Compare English *s(up)posing.*

[47] Compare English *former,* with the comparative ending *-er* added to *form-,* Old-English *forma,* 'first,' and *m*-superlative = Greek πϱόμος, 'foremost.'

prucuna (.procoˋnā), 'pitcher' or 'jug' from which the cupbearer pours into the cups, metathesized form of .procoˋān < *προχοᾱν, Doric form of προχόην.

In *Mu.*, 4.22, we find *trau pruχś* in place of *trau prucuna.* This *pruχś* is .procs < ˋ.proc(o)os < πρόχοος, the masculine form of προχόη, above, but treated in Etruscan like a neuter, that is, with the accusative like the nominative. A more nearly correct masculine accusative is found in F. 2754*a* (*pruχus*). It will be observed that such adopted words do not reveal just the phonological-morphological changes that native words underwent, and foreign words very early adopted. It is obvious that the -ς and -ν of the Greek words, which appear as *-s, -n-,* or *-n–m* in Etruscan (*pruχs, prucuna, pruχunum*) were not felt to be respectively nominative and accusative endings by the Etruscans but were regarded as belonging to the stem. Similarly, the *-um* of *vinum.*

22. *CIE.* 5168

This Volsinian inscription is cut on a cylindrical stone, said to be the base of an altar, but more likely the base of an image of a chimaera which stood in front of an asylum, or temple that had the right of sanctuary. Such an asylum served as an inviolable refuge to criminals, slaves, and other persons fleeing from pursuit and seeking protection. The institution is best known in Greece, Asia Minor, and Syria, and the Etruscans doubtless brought it to Italy from their former home in Lydia. The most famous image of this sort is that at Florence. (F. 468 and Plate XXIX.)

Tinia : Tinscvil
s-asil : sacni

(ˋ.tīnia ˋ.tīnscwīls .aˋsīl .sācni)

'Protection. Sacred asylum of the guardian chimaera'

tinia (.tīnia), 'protection'; also the name of the god corresponding in a measure to Jupiter.[48] The word is from .tenēntia, a participial abstract like Latin *prōvidentia;* .tenēntia, 'protection,' became, by haplology (§ 35) and teleterosis (§ 33), .tēnia > .tīnia.

tinscvils (ˋ.tinscwīls), 'of the guardian chimaera.' The first part of the word is identical with *Tins,*[49] 'Jupiter,' being the participle .tenēnts, 'guarding,' 'protecting,' which (see *tinia,* above) became .tēns > .tīns = *Tins.*[50] This nominative was used also as an accusative and thus became the stem of the word, with the new dative *Tins-i*. The second part of *tinscvil* is a reduction of .capellos > .capells > .caˋpell > .cwēl > .cwīl, 'kid,' which was also the original meaning of Greek χίμαιρα. That the word in time lost the original 'kid' or 'goat' idea is clear from the fact that we find the name *Tinscvil* not only on images of the chimaera (see above), but also on other images intended to instill fear, for example, an image of the griffin (F. 1047 *bis*, Plate XXXV), and even of the dog (F. 1047). It is also quite likely that popular etymology associated the word with *Tins*, 'Jupiter.' [51]

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[48] Körte, *PW.*, 767.

[49] Skutsch, *PW.*, 787.

[50] With *Tins,* 'the guardian,' 'the Lord,' 'Jupiter,' compare the similar use of *wealdend,* the Old-English participle of *wealdan,* 'wield,' 'have control over,' 'govern,' in the sense of 'ruler,' 'lord,' 'king.'

asil (.aˋsīl), 'asylum,' from Greek ἄσῦλον. The Etruscan *-ī-* would seem to imply that the word was learned from Greeks in whose speech υ early became fronted (but cp. *rotn,* **11**), namely, Javonian Greek, in this case doubtless the Ionic speech of their neighbors in Asia Minor. I have before[52] called attention to this in discussing the *ϑne*, 'templum,' on the Bronze Liver, which is from *toˋmē, Greek τομή, 'section.'

sacni (ˋ.sācni), 'sacred' < neuter *sācri, early Latin *sācri*(*s*), 'consecrated,' whose long *ā*[53] is in accord with Etruscan *sācni*(*s*), as is shown by *-u* = .-ǭ from unstressed *-ā* in *sacniu* (.sācniǭ < .sācniā) by the side of .eˋcā (F. 2182). See § 41, and compare *śacnicleri* (**21***e*).

23. Volcian Tombstone, F. 2182

Eca suϑi Larϑal Tar. Ls. sacniu

'This (is) the sacred tomb of Lart Tarna, (son) of Laris'

eca (.eˋcā), 'this,' is the nominative feminine of the demonstrative adjective *eco-*, which is found also in Oscan.[54] In F. 2598 this form appears as a demonstrative pronoun that has taken on the value of a personal pronoun, as *die* is often used with the value of *sie* in German. For the later form *ca suϑi* (*CIE*. 4539), see *suϑi* (ˋ.śutti), later form of *śuϑis* (**8, 24**).

Larϑal (.lartal), genitive of *Larϑ*.

Sacniu (ˋ.sācniǭ), feminine of an *o*-extension[55] of *sacni*, 'sacred' (cp. **21***e*). For *-ǭ* < *-ā*, see §41, and see *cerinu* (**24**). Schulze[56] observed that *sacniu* was no name, as had been supposed.

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[51] *EEI*. See Appendix: "Note on Janus."

[52] Lindsay, *The Latin Language*, p. 183, L-N. 387.

[53] [Another possibility is Lydian *quvellu*, 'king' (Littmann, *Sardis*, p. 18, top). Then *ϑanaχvel* (F. 2333*b*) would be equivalent to Greek *Hipparchos* (δάμνος · ἵππος, Τυρρηνοί, Hesych. I, 884). Compare likewise the proper name *Cvelne*.—F. A.]

[54] Buck, *O-U.Gr.*, § 196.

[55] Brugmann, *Grundriss*, Vol. II, Part 1, § 117.

[56] Schulze, *LE.*, p. 149, n. 3.

24. Tombstone Epitaph, F. 2183

Eca śuϑis Velus Ezpus clensi cerinu
'This (is) the dark tomb of Vel, son of Estpo'

eca (.eˋcā), 'this.'

śuϑis (.suttis), 'the down-below,' 'grave,' 'tomb'; see *suϑi, EI.*, No. **8**.

Velus (.weˋlōs), genitive of *Vel* (.wel) < ˋ.welo < .welō. For *-ōs,* see § 15.

Ezpus (.estˋpōs), genitive of .estˋpō, a very rare name; compare *Espia* (*CIE.* 4313; Schulze, *LE.*, p. 162).

clensi (.glenˋsi) 'of the son' (**19**.9).

cerinu (ˋ.cę̄rinǭ) < .cērinā (§ 41) < .cairinā (§ 52) < .cairəlā (§ 67) = Latin *caerula,* 'dark,' 'gloomy.'[57] See *sacniu* (.sācniǭ), **24**.

25. Bronze Tablet, F. 2610 *bis*

This inscription is found on a brass tablet that probably was once attached below or near a representation of the new moon.

Mi teurś kaϑuniia sul
(.mī .teˋōrs .caˋtōnyǭ .sōl)
'This (is) the underground boat of the sun'

mi (.mī), 'this'; see *ame,* **19**.2.

teurś (.teōrs), 'the moon boat' < ϑεωϱίς (with or without ναῦς), 'the sacred ship.' This term is usually applied to the ship that carried ambassadors sent to consult an oracle, present an offering, or represent the state at the great Hellenic games. The word was also applied to Charon's boat, and, in our inscription, to the boat-shaped new moon, as we shall see directly. Compare *Tivrs* (on the Bronze Liver), dative *Tiuri,* 'Luna,' and *tivrs,* 'month(s).'[58]

kaϑuniia (.caˋtōnyǭ), 'underground,' the feminine of the adjective betrayed in Latin *catōnium,* 'the Lower World'; compare Greek ϰάτω, 'down,' 'below,' 'in the world below.'[59] "The sacred underground ship" is the moon. The second or third day of the new moon, soon after sunset, the whole sphere shows faintly, and appears to be a dark orb resting in a bright crescent. This gave rise to the notion that it was the darkened disk of the sun in a golden boat, and to the story that the sun fell asleep as night came on and, while sleeping, was carried in a golden boat along the northern border of the earth—or, as here implied, through the Lower World—to the east again. In religious ceremonial the sun was represented by a golden disk,[60] and the moon by a little golden boat which, when seen from the side, resembled a crescent. A hoard of about a hundred of these, doubtless intended to be sold as votive offerings, was found some years ago in Jutland.[61]

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[57] I at first thought that Etruscan *cerinu* was Latin *cērina* and referred to the yellowish color of the stone.

[58] Skutsch, *PW.*, 793.

[59] [Or possibly = χϑόνιος.—F. A.]

sul (.sōl), 'the sun,' Latin *sōl* < *̣sāwel, as also Greek 'ᾱέλιος, ἥλιος, etc. Our *sul* (.sōl) is the genitive < *̣sōl-al. A mate of .sāwel was *̣suw`el, whence, by metathesis, Etruscan *Usil,* 'Helios' (F. 2142), genitive *Usils* (Bronze Liver); compare Old-Irish *sūil,* 'eye,' like Old-English *dæges ēage,* 'eye of day,' 'sun.'

26. Ga. 912 *bis*

"Sotto il piede di una gran tazza a figure nere"[62]

eku ϑuϑiial zreχuva zele śulzi pulϑes uva purtisur
apruvunetur areketi

.ecō tōtī-al streguā, stēllę śōlstī, pultes offā portisor.
approfōnətor arrectī.

'In this let [the priest] carry the municipality's sacrificial meat, the disks of the solstice, the offa of sacrificial pulse. May they be approved by the exalted one.'

eku, see *eca,* 23, 24.

ϑuϑiial, cp. Marrucinian *toutai, 'civitatis,'* Umbrian *totar,* Etruscan *tuϑines* (*CIE.* 4196).

zreχuva, Latin *strebula;* the *b* of *strebula* is therefore of labiovelar origin.

zele, Latin *stellae.*

śulzi, Latin *solstiti,* with *ś-* from **sw-*.

pulϑes uva, Latin *pultis offa,* Cicero, *De Div.,* II, 35, 73.

.portisor is an infinitive-imperative of an *s*-aorist.

.approfōnətor, a passive subjunctive, with *ō* corresponding to the ω of φέρωσι; *f* < **bh.* Gamurrini reads *aprueuntur,* mistaking the ᚨ for an ᚫ.

areketi, .errectī. But as a rule unstressed, .ct > .cc in Etruscan.

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[60] Compare *zele śulzi* (26), 'the disks of the solstice,' or 'representations of the sun at the solstice.' See also the reproductions in Montelius, *Kulturgeschichte Schwedens,* pp. 136 ff., and compare Meyer, *Geschichte des Altertums,* I, 479, 632.

[61] Montelius, *La Civilisation Primitive en Italie,* p. 138.

[62] [Adapted from "The Tuscan Tung" and from stray notes.—F. A.]

EXTRACTS FROM "EARLY ETRUSCAN INSCRIPTIONS"[1]

F. 2343

Vecaϑ Xermupi φericaru :n *stani puru hem*
Vecat kerməbī peri`cāro n(āto) stan`nī pūro hem
= percārus nātus stannī pūrus hemō

'Vecath, the beloved son of Chermupu, a man free of alloy'

F. 2346 and 2345

2346: *icamus ia ϑriφtent χa · pi*
.īcāmos yā tripdēnt-kə pī
2345: *m-ϑuχtiϑ · nvhunt · aisaru · ustvn · fravvmv · pici · fust · raneϑ*
m-duktit nōōnt aisarō ustōn frāwəmo piki fust rannēd
'Now let us strike up (the lyre), and let the devout ones dance the sacred dance. Then lead thou forth, O Messenger of the Gods, the burner of the dead; we have brought the pitch, he will sprinkle the place of burning.'
Latin: *Icamus iam tripodent-que pii* (et) **ductite nuntio-*(?) (deorum) *ustorem feravimus picem bustum *raniet.*

ϑuχtiϑ: cp. Latin *ductitare.* The Etruscan verb is of the third conjugation.

aisaru < .aisarōm, genitive plural. "Aesar Etrusca lingua 'deus'" (Suetonius).

ustvn < .ustōr'm < ustōrem.

raneϑ = .ran`nēd < .ranyēd < .raniēt; compare Greek ῥαίνω, '(be)sprinkle.'

Note on *Janus*[2]

The *Ani,* 'Janus,' that is often cited[3] as a sort of mate to *Uni,* 'Juno,' is a ghost-word. The idea is based upon the erroneous supposition that the Bronze Liver has *Ani Tne* in section 6. Close scrutiny reveals the fact that the text reads *Tins ϑne,* corresponding to the *Tins ϑne-ϑ Θuflϑas* in the inner sections 18–20. It is remarkable, however, how near Janus was all the time. For *ϑuflϑa* or *ϑuplϑa* (F. 1054, *CIE.* 445) is .dupl`tā < .dupil`tā < .duplāti < duplātio < duplātiō, 'doubleness.' . . . . That is, we have before us no other than Janus Bifrons, who so often appears in the form of a lamp-statuette, called *alpan* (.al`pān < .lam`pā, Greek λάμπη). . . . . The *Tins ϑne* (*e*)*ϑ Θuflϑas* on the Bronze Liver is *Jovis templum et Jani,* 'The section ('temple' in the technical sense) of Jupiter and Janus.' *ϑne* is .tnē < .təmē, Greek τομή, 'section' (compare the *tem-* in Latin *templum*).

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[1] [See *E.,* 1. In reproducing Dr. Hempl's text and translation of these inscriptions, I have introduced a few trifling corrections which were indicated on the margins of his copy of the original.—F. A.]

[2] From "Early Etruscan Inscriptions," 9–10.

[3] Körte, "Etrusker," *PW.,* 767.

EXCURSUS III

THE ROMAN NAME

That Latin and Etruscan were spoken side by side in Rome is a matter of history. That Latin was influenced by Etruscan no one would deny. That certain Etruscan speech characteristics persisted and were never eliminated can readily be shown. The most remarkable case of this is the form of the name *Rōma* itself.

Schulze[1] has associated *Rōma* and *Rōmulus* with the Etrusco-Roman gens and tribus *Rōmulia/Rōmilia,* whose land lay on the Etruscan side of the Tiber, and whose name appears in Etruscan *Rumlnas, Rumate,* etc. The prevailing doctrine that Etruscan and Latin are totally unakin would force us to assume that the Etruscan name was adopted from the Latin, or the Latin name from the Etruscan; and this latter is done by Schulze, in spite of the accepted (but erroneous) doctrine that Etruscan had no *o/ō.* But the fact that Latin and Etruscan are really closely akin would permit us to assume that the name might be both Etruscan and Latin—as English *beer* is not derived from German *Bier,* though English *lager* is from German *Lager.*

In an early inscription from Tarquinii (F. 2292, 2297) we find the form *Ruvmia* (.Rou̯mi̯ā < .Rou̯mi̯ām). .Rou̯mi̯ā is perfect early Etruscan and .Rou̯mi̯ām perfect early Latin. But from this stage on the two dialects diverge. In the development of such a name in *-i̯a,* we have to deal with the stem as it appears in the oblique cases, hence with .Rou̯mi̯ā-. In Etruscan, the consonant *i̯* assimilated to the preceding consonant and later quite disappeared (§ 34); but in Latin it became the vowel *i.* Moreover, while it is true that the diphthong *ou* became the long vowel *ō* in Etruscan, as in Umbrian, Latin, etc., it did not rise to *u* in Etruscan as it did in Latin (§ 53). Hence, the change of .Rou̯mi̯a- to .Rōma is in perfect accord with Etruscan phonology. This .Rōma we find in F. 2166, spelled in characteristic Etruscan fashion *Ruma.* (Compare *Verona, Bellona,* etc.) The only thing Latin about the word *Rōma* is the shortening of the final *-ā* to *-ă.*

As *ou* became *ō,* later *ū,* in Latin, and as *i̯* became *i,* the true Latin development of .Rou̯mi̯a would be .Rūmia, masculine .Rūmios, later .Rūmius. In accordance with the tendency that changed *Jūpiter* to *Juppiter,* and *mītō* to *mittō/mitto,* we may expect *Rūmia* and *Rūmius* to appear as *Rummia* and *Rummius.* This *Rummius* we find in Carsulae.[2]

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[1] Schulze, *LE.,* pp. 579 ff.

[2] Schulze, *LE.,* p. 368.

And had it not been for the decided and evidently long-continued influence of Etruscan on Latin, the mistress of the world would doubtless have been known as *Rumia* or *Rummia,* and not as *Rōma.* There is also a compromise form *Ruma* (.Rūma), with Latin *ū* but without *i̯*.[8]

As Schulze has pointed out, the Etruscan *Ruml-nas* is a derivative of the name that appears in Latin *Rōmulus.* This Latin *Rōmulus* is not, however, the true Latin form (which would be *Rumulus*) but reflects an earlier Etruscan .Romslo(s) (.Roumslos), which is implied also in Etruscan *Ruml-nas* (.Rōml̥nas). In this connection, I should add that in the early public vault provided for the burial of freedmen at Corneto-Tarquinii there was buried (F. 2307) one *Runru* (.Rōnro < .Ron(ə)ros < .Rōm(ə)los), and near him (F. 2309) a *Laris Fanurus* (.Fan(ə)ros < .Fam(ə)los) (compare *Vanal, LS.* 14)—

Etruscan .Rōn(ə)ros is to Etrusco-Latin *Rōmulus* as
Etruscan .Fan(ə)ros is to Latin *famulus.*

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[8] As older *ō* (written *-o, -o-e,* or *-oo-*) rose to *ū* in Modern English, compare *to* (.tū), *move* (.mūv), *soon* (.sūn), Old-English *Rōm* rimed in early Modern English with *room* (.rūm). The present pronunciation is due to Italian influence.

EXCURSUS IV

THE PREHISTORIC WANDERINGS OF THE ITALIC TRIBES

In recent years scholars have come to look with more and more favor upon the tradition reported by Herodotus, namely that the Etruscans came to Italy from Lydia.[1] In stating this, orthodox Etruscologists have been inclined to regard it as an additional evidence of the truth of their claim that Etruscan was not Indo-European. It is discouraging to find how much loose thinking a great question like this will stir up. It is natural, though rather naïve, to assume that the Italic peoples originated in Italy and that, if a population found in Italy can be shown to have come there from elsewhere, it is thus shown to be not Italic. It is, however, thoroughly established that Indo-Europeans found their way into Asia Minor as well as into Greece and Italy. If we acknowledge that the Etruscans came from Asia Minor to Italy, they could, of course, have done so whether they had always lived in Asia Minor or had come there from Indo-European or other foreign territory. We have long been accustomed to think of Indo-Europeans as coming down from central Europe to Italy and Greece and Asia Minor, but we are inclined to find it rather too complicated and difficult to conceive of them as wandering back and forth in the Mediterranean lands. And yet we are well aware that this is precisely what other Indo-Europeans, for example, the Cimbrians and the Goths, did do. We recognize that a people may wander afar and that different related tribes may engage in such a migration and settle near one another in the new home, but we are disposed to find it rather unlikely that related tribes should wander independently, but ultimately come again to be neighbors in another land. And yet we know that that is exactly what happened when the West-Germanic Saxons, Angles, and Jutes left the Cimbrian (later Danish) peninsula and the adjacent territory to the south and again became neighbors in Britain, and when, at a much later time, such Germanic populations as Englishmen, Swedes, Dutchmen, and Germans settled along our Atlantic coast. In my report on Hittite Greek (*H.* I) I have shown that, while some Javonian Greeks early came down into Greece and were afterward followed by Doric and other kinfolk, other Javonian Greeks wandered from their early homes along the Danube far to the east and dwelt long in eastern Turkestan, Media, and Persia, before they turned westward again and made their way into Armenia and central Asia Minor, where they were later found by distant Doric kinsmen who came by way of the Mediterranean. When we try to peer through the mists of mystery that shut off prehistoric times from our sight, we are inclined to conceive of prehistory as far briefer and less complicated than it doubtless was.

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[1] Körte, *PW.*, 731.9 ff.

The Italic dialects are divided into two groups: (1) the *Q*-group, in which Indo-European *q* remained intact, and (2) the *P*-group, in which Indo-European *q* became *p*. Hitherto, the *Q*-group has been supposed to have consisted of Latin and Faliscan only; it really was much larger. Siculian and Faliscan may properly be counted as offshoots of Latin. This leaves us with Venetic, Latin, and Etruscan, as opposed to Oscan, Umbrian, Old-Sabellic, etc. The decided difference between the *Q*-group and the *P*-group, not only in speech but also in civilization, led Hirt[2] to suggest that there must have been a long period during which the two groups were widely separated from one another before they again became neighbors in Italy. This keen observation turns out to be as true as it is important.

In tracing the history of a people we must not disregard their traditions unless they are inherently absurd or are contradicted by other evidence. Those of the Roman people, as all the world knows, tell of the coming of Aeneas and his followers from the shores of the Troad, in northwestern Asia Minor. Livy, himself a native of the Venetic city of Patavium, tells us that the Veneti, under their leader Antenor, a cousin of Aeneas, left their old homes in Paphlagonia, to the east of the Troad, and made their way up the Adriatic, founding the city of Patavium, the modern Padua. Herodotus repeats a tradition current among the Etruscans, to the effect that they had come from Lydia, on the western coast of Asia Minor. We also know[3] that Etruscans once lived on the island of Lemnos and in other localities on the northeastern shores of the Aegean. All these varied national traditions agree in the most remarkable way in pointing to portions of western and especially northwestern Asia Minor as old homes of the *Q*-folk. That, in migrating to these parts from their primitive homes in central Europe, they had made their way, as the Phrygians did, across the Balkan peninsula, there can be no question. On the other hand, it is evident that the *P*-folk lagged behind in central Europe but later made their way more directly, via Illyria, into eastern and northern Italy.[4] Hither, in the course of time, came also their more sophisticated *Q*-cousins, the Etruscans, bringing with them the superior culture that they had acquired during their long sojourn in the east. And, somewhat later, these Etruscans were followed by the Veneti and the Romans, more civilized than the Oscans and Umbrians but less than the Etruscans. And thus it came about that these kinsmen, various tribes of *Q*-folk, were neighbors in Italy, much as their distant ancestors had been in central Europe.

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[2] Hirt, *Die Indogermanen,* II, 611.

[3] Körte, *PW.*, 733.9 ff.

[4] Hirt, *op. cit.*

ETRUSCAN WORD LIST

[All references are to pages. Bold-face numerals designate passages in which the word in question is explained or interpreted.

Certain letters appear to be used interchangeably in Etruscan spelling; between these no distinction is made in the ordering of words. Thus *χ*, *k*, and *q* are treated as though they were *c*'s, φ as *p*, *ś* as *s*, *d* and ϑ as *t*, *v* and *o* as *u*.]

aker, 38, 41, 60, **88**
aciam, 51, 57, **116**
Acnai, 102
acnanasa, 104 n.
acns, 103 (*see* an)
Aχuilaś, 84
Aχvile, 49, 99, 120
Aelχe, 99; -s, 61, 99
Afli, 104
Afunas, 38, 43; Afunaś, 127; Afuneś, 132
Aiflna, 119
aisaru, 51, **123**, **141**; aiseraś, **63**
alaφoi, 63
aliqu, 39, 53, **120**
alpan, **142**
ama, **129**
ame, 51, **127**
an, 104; anc, **103**; ancn, 104 n. (*see* acns)
Ana, 121
Anaini, Aneini, 44
'Ani' (= Janus), **141–42**
aprenśaiś, 59
aprueunetur, 41, **135** n. (*but see* 140)
apruvunetur, **140**
ara, 58; arai, **92**; araś, 40, 55, 56, 59, **129**
arce, 104 n.
areketi, **140**
Ariaϑa, 34
Arnϑ, 75; Arnϑialiśla, 62; Arnϑurus, 85
Arznal, 130
aśi, **39**
aśial, 53, 61, 62, **89**; aśiale, 61, 80, **89**
Ataiun, 105
Atianai, 59
av, **86**
avcva, **49**, 58
Aule, 130; Auleśi, 44, 130
aomai, 50, **90**
aunem, 44, **112**
Auśva, **26**, 51, 57
avils, 25, 63, 103; avilś, **134**
avis, 34, 53, 56, **86**, 90 (*see* avils)
az-favanai, **47** and n., 48

-c, 102, 132 (*see* χue)
ca (*for* eca), 138
χa (*for* χue), 141
caares, 38, **110**
Cae, Caes, Cai, 108
Xaireals, 104
Kaisies, 119
Caleśi, 61
Caliaϑesi, **54**
Calisnial, 63
canulis, 34, 38, 42, 54, **113**
Xapria, 58
caresri, 61, 62
Xarϑillas, 54; Xartillaś, 50, 68, 76
caru, 37, 40, **128**
Xaru, 106
Caϑ, 26
caϑsc, 85

kaϑuniia, 40, **139**
ca-va-li-ya, 49, 54, **118**
qaves, **49**
Kaviiesi, **108**
χe, **49**, 50, 103 (= χue)
cealχls, 25, 41, 67, **69**; cealχus, 67, **69**
cean, 25, 56
ceanil, **66–67**
ceanuϑ, **25**, 39, 41, 65
cearϑiś, 69
cehen, 41, 42, 46, **107**
Ceisinia, 74
celc, **25**, 65, 67, **69**; celχls, **69**
cemul, 34, 40, 53, 58, **129**
cenu, 39, 40, **57**; cenus, **132**
Cereni, 34, 44, **55**, **133**
cerinu, 37, 44, 54, 57, **139**
Xermupi, 141
cerurum, 42, 51, **64**, **122**
Cestnal, 56; Cestnaś, 50
Cezartle, *etc.*, 70
cezp, 69, **70**, 103
cezpalχals, 103
Ceztes, 70
khiliun, 28
Qhrunus, 60
ci, 41, **65**, **66**, 104 n.
cialχus, **69**
cianil, 41, 54, **67**, **69**
ciart-, **66**; ciarϑe, 71, 99, **100**
Ciartialisa, 62; Ciarϑialisa, **65**, **100**
cilϑ, 42; cilϑl, 41, 54, **136**; cilϑs, **136**
cina, 61, 64
cis, χis, 67, 134, 135; cizi, **69**
cisum, 42, 43, 135
cla (*for* χue), 50
clan, 23 and n., 34, 41, **131**
    claniu, 131 n.
    claniunia, **131** n.
    clanl, 63, **131** n.
    clenar, 23, 38, 104 n.
    clenarasi, **59**, 60
    clensi, 23, **131**, 139
    cles, 63 n.
cle (*for* χue), **72**, **127**
Clevsinsl, 46
Cluoi, 63
Cracial, 75
Creices, 104 n.
Crespe, 76
cri (= cārī), 62
χva (*for* χue), 50
-χva (< *trans), **50**
Qvartv, **50**, **68**; Xvartv, 69, 100
Cuclnies, 62
χue, **49–50**, 72, 113
Cvelne, 138 n.
cver, **102**
Xvestnaś, 50
qui, **49**, **105**; qvi, 63
Cvinte, 50
cupe, **119**
Xurcles, 75
Corsdle, Corstli, 70
(ko)ro, **91**
qutum, 122

eca, **138**, 139
Ecnati, 76
eku, 63, 140 (*see* eca)
ei, 102
eiśnev, 53
Elinai, Elinei, 77
-em (= 'and'), 72, 111, 132
en, 42
Enaś, 54, 58, **133**, 136
enesci, 39, **130**
epanamina, 34, **123**
epim, 34, 42, 51, **108**
epl, 53, **130**
eptesio, **92**
ersce, **53**
erut, 41, 43, 53, 55, **110**

esals, 67, **68**, 103; eslem, 68 n.; eslz, 66, 68
eśt, 41
estla (= *est-que*), 35, **127**
et, **72**; eϑ, **26**, 72, 108, 123
"Eϑauśva," 26
etera, 40, **105**; eterais, 60; eterav, 59
eϑerse, **134**
eule, 46, **125**
eurat, 38, 40, 46, 53, 55, **127**
eus, 41, 43, 46, **112**
eviśϑo, 35, 42, 43, 51, 52, 61, **86**, 89
ezpus, 56, **139**

fanu, **47**, 51
favanai, *see* az-favanai
fanurus, 47, 60, 88, 143
farϑna, **103**, 104; farϑana, 104
faśei, 59
Fasti, 45, 76; Fastia, 48
φaves, 105
felic, 40, 41, 42, 73, **132**
Felmui, 48, 101; Felmuial, 101
fesϑ, **47**
firin, 34, 41, 42, **133**
Flave, Φlavi, 105
fler-χva, 51
fravvmv, **51**, **141**
fronta, **102**
fvimu, 47, **105**
Fulni, 30, 43, **100**
  Fulnai, Fulnei, 101
  Fuluna, 101
Fulu, 35, 101
fuśleri, 43, 44, 47, **128**
fust, 47, 51, **128**, **141**
futuar, 68 (*see* huϑ)

hante, 135
haralio, 51, 61, **91**
Hasti, 76; Hastia, 48, 93
haϑe, 35, 51, **135**; hate, 135
Haϑli, Haϑlials, 103
haϑrϑi, 35, 42, 47, **135**
Hele, Helesa, 77
helu, **40**, **57**
hem, **141**
hen, 35, 66
hen (= Lat. *eme*), **129**
Hercle, Herχle, 28
hinϑia, 53, **106**; hinϑiu, 48, 53, 63, **106–7**
hintu, **136**
Holaies, 43, 44, 53, 61, 80, **83**
  Holaiesi, 61, 80, **89**
hui, **102**
Hulχenas, 63 n.
Hulu, 101
huśina, **48**
Hustnal, 104
huϑ, 50, 65, **68**; hut, 66
  huϑs, 67
  huϑis, 68
huϑnars, 63

ia, **141**
iχ, **133**
iχamus, 40, 51, **141**
iχutevr, 37, 40, 46, **133**
im, 42
in, 42
inai, **54**, **108**
in-pa, 42, **119**
in-pein, 42, **121**
ipa, 38, 42, **129**
isairon, 43, 44, 51, 55, **111**
iśi, **102**
iśmu, 40, 42, 64, **125**
itruta, **102**
itsφa, **34**, **108**
iui, **102**

la (= χue), 72, **127** (*see* estla)
Lala, 53, **73**
lare, **127**

Lareceś, 55, **123**
Larisal, 63, 104 n.
  Larisaliśla, 63
Larnϑ, 99, 103
Larϑ, 28, 76, 104; Lart, 28
  Larϑal, 53, 76, 138
  Larϑals, 132
  Larϑia, 63 n., 77, **105**
  Larϑial, 75
  Larϑialisa, 62
  Larϑl, 62
larϑu, **105**
laśa, 38, 52, **126**
lautn, 43, 44, **127**; lautni, 99, **127**
Laziu, 52
Lenie, 24 n.; Leinies, 24 n., 75
lescul, 37, 40, 54, 55, 58, **129**
leśc, **130**, **132**
leśe, **61**
Leϑn, 26
limunaatin, 38
Limurce, 119
Liśipiϑi, 38, 41, 44, 46, 54, 59, **123**
lupu, **21**, 103; lupuce, **21**
Lurciius, 46
luu, **119**

-m (< em), 90, 91, **129**, 134
ma, **122**
maχ, 34, 65, **67**; maχs, 67
mamima, **34**, 38, **122**
mana, **54**, **118**; mano, 118 n.
maras, **84–86**, 90
Marce, 23; Marces, 104
maru, **84**, **85**
marunux, 85, 128
matam, **133**
mav, **86**, 90
mealχls, 54, **70**
meani, **41**, 54, 66, **67**
meχl, meχlum, **70**
Melisnas, 63, 76
Meluta, 76
Menle, 73
Menrva, 57
meϑlm, meϑlum, **70** (*see* meχl)
meϑlumeri, 34, 62, **136**
Mezu, 52
mi (< ame, **127**), 42, 63 n., 108, 117, **119**, 120, 122, 123, 139
mimniś, 41, 42, **110**
mlaχta, 38, **121**; mlaχuta, 38, 39, **121**
mlerusi, 42, 43, 53, **121**
mu, **70**
mulu (< *moini̯a), 34, 37, 40, **113**
mulu (< *melsom), 46, **108**
municl, 67, **70**
munile, **54**
mu-no-ti, 54, **118**
Murina, morina, 73, 75
Morinail, 53, 58, 59, 82, **89**
muvalχls, **70**

-n (< em), **119**
n (= ‘natus’), 141
n (= ne), **128**
nac, **41**
naper, 34, 66, **129**
napoϑś, 20 n., 22, 37, 52, **83**
Navesial, Naverial, **55**
neftś, **20**
netśvis, **101**, **102**
niχ, 42
niceϑu, 38, 41, **122**
nu, **118**
nvhunt (‘nuntius’), **141**
Numitor, 85
Paχanati, **85**
Paχatura, 85; -s, 59, **85**
pace, 63, **105**
pa-ci-mi-ra, 47, **118**
palamneus, **54**
Papa, Papania, 74

partenus, 43, 51, **111**
par, 38, 39, 42, **116** (*see* per)
φaves, 105
pχapχa, **48**, 50
Φelucu, **53**
per, 42, **116**
peraś, 35, 42, 56, 59, 116, **129**
φericaru, 61, 116, **141**
Perseφuri, 28, 40
  Persipnai, 77; Φersipnei, 28 n., 77
Φersu (= persōna), **94** n.
Petrui, 77; Petruial, 74
Pevtnial, 75
phenus, **28**
pici, **141**
Piute, 54
Plati, 45
Plute, 45
Praisioi, **108**
Precaϑuraśi
priϑaś, **59**
Priumneś, 103
pruχś, 137; pruχum, 119; pruχus, 137
prucuna, 34, **137**
promts, **20**
prvna, 57
pvele, 20, 44, 46, 54, 58, **125**, 126
puia, 20, 54, 62, **67**
puil, **102**
φoke, 43, 51, 61, **92**; φoki, 61, **89**
polem, 41, 43, 51, 53, **111**
pulϑes, **50** n., 54, **140**
Pumpas, 34 n.
punϑlai, 44, **125**
Pupu, 29, 42; -ś, 34 n.
pura, 40, **120**; puru, 43, 61, **141**
purenai, **34**, 43, 44, 59, **123**
purtisur, 135 n., **140**
purtśvana, 103
Pusca, 76
pute, 43, 51, 54, **135** (*see* pulϑes)
putere, **119**
puϑs, 54

Rafi, 45
Ramϑa, **39**, 40, 77
  Ramϑas, 75, 104
  Ramϑu, **39**, 40, 57
  Ramϑvla, 76
raneϑ, 53, **141**
raquvus, **49**
Rasnal, 53; Rasnas, Raśneś, 44, **128**
Remzna, 76
repine, 42, 54, **135**
repinϑi, 47, **135**
ruχiaee, 44, **125**
Rufi, 45
Rufrie, 48
Ruife, 48
Ruifre, 48
Ruifriś, 48
Ruma, Rumate, etc., 143
Rumlnas, 46, 143
Runru, 46, 61, 143
rotn, 35, 42, **110**
Ruvfe, 45
Ruvmia, 46, 57, 143

śa, 52, 65, **69**, 86, **106**
sacni, 42, **138** (*see* sacniu)
sacnicla, 53
  śacniclal, 54, 62
  śacnicleri, 54, **135**, 136
  sacnicn, 34, 43, 54; śacnicn, 62, 136
  śacnitn, 34, 35, 136 n.
sacniu, 37, 40, **138**
śanti, 37, 38, 42, **113**
Scarpal, 99
sχaϑ, 38, 42, **113**
scipmu, 28, 34
ścuna, 34, 40, 42, 43, 50, 52, 57, **132**
Seasi, 46, 58, **84**
sec, 28; seχ, 28, 104

Secstinal, Scesctna, Sesctna, Sescatna, Sesuctna, 69
Sexartesi, **69**
Secu, Secuś, 74
Secunia, Secune, 74
Sehtumial, 69, Sehtumnal, 69
selvansl, 69
semφ, 23, **69**; -s, 67
semφalχls, **69**
Semϑni, 69
Seronai, 41, 42, 44, 55, 58, **87**, **93** ff.
Seϑre, 76, 93
Setume, Seϑume, 69
śeuś, 63
sez, **68** and n.
Siales, 34, **120**
sialχveis, 41, 80; śialχveis, **67**, **86**
  sialχis, 80
  śialχvis, 67, 90
śie, 53, 108, **123**
Śiva, 96 ff.
Sivai, **88**, 90
sleleϑ, 41, 44, 53, **128**
snvti, 43
śpural, **62**
  śpureri, 34, 42, 43, **62**, **136**
  spureśtres, **62**
sta, **119**
stani, 52, 141
svaϑlu, 102, **104**
śuci, 40, **133** (*see* zuci)
sul, 43, 54, **140**
śulzi, 39, 52, **140**
śupelneξ, 35, **124**
śuriseis, **132**
sotris, 42, **112**
suϑi, **107**; śuϑis, 52, **139**; suϑiϑ, **53**

-ϑ (*for* eϑ), 42, 88, 89
Θamcvilei, **58**
ta-na, **118**
tanna, **127**
Θanaχvel, 41, **50**, **138** n.
  Θanχvil, 41, 77, 104
  Θanχvilus, 50, 63, 75
Θanr, 26
Taφanias, 74
ϑapicu, 39, 40, **119**
ϑapintas, ϑapintais, 59
Taφu, 74
ta-ra-vi, 35, 44, **118**
Tarχnai, Tarχnas, 76
Tarnai, 77, 104; Tarnes, 104
Tavarsio, 39, 43, 44, 55, 61, **88**, 110
ϑaura, 40, **57**; ϑauruś, 43, 44, **56**, 63
Taves, 110
.dec (= 'ten'), 54
tece, **116**
tecsa, **106**
teis, **46**, 64, **128**, **132**
telet, 53, **112** (*see* tetet)
tenac, 132
tenu, tenue, 53
Θepri, Θeprie, Θepries, 74
desiem, 51, **108**
tesnś, 53, **128**
tetet, 41, 53, 54, **116**
  tet, 35, **111**
Tetnies, 104
teurś, 46, **139**
ϑeusi, 46, **120**
ϑeusialϑia, 40, **120**
teza, **128**
ϑii, **46**, **132**
ϑil, **41**, 53, **132**
tinia, 41, **137**
Tins, **137**, 138, 142; Tinśi, **134**
tinscvil, 50; -s, 41, **137–38**
ϑis (< *duis), **68**; tis, 92
tisu, 41, 43, **112**
Tite, 51, 74
  Titi, 23, 74
  Titial, 76
  Titeśi, 61

ϑiu, **46**; tiu, **63**
Tiuri, 42, 134, **139**
ϑnaϑ, **53**
ϑne, 35, 40, **142**
tnucasi, 34, 43, 60, **132**
trau, **136–37**
ϑrce, 43, 53, 129 (*see* turce)
treten, **111**
ϑrfna, 42, 43, **124**
ϑriφtent, **53**, 54, **141**
Truials, **54**
trutnvt, **102**
to (*demonstrative; see* to-u), 40, **89**
ϑu, 43, 65, 66, **68**
tua, **28**
ϑuχtiϑ, **141**
ϑueś, 107; ϑueśi, 67, **68**
Θuflϑa, 98, **142**; -s, 104
tular, **53**, **128**
tularu, 38, 39, 42, 43, **130**
tulϑans, 53, 54, **135**
  tulϑansur, 53, 54, **135**
ϑumarvm, 34, 40, 51, 60, **122**
ϑuna, ϑuneśi, **68**
ϑunz, 66, 68, 103; ϑunzri, 68
ϑupitai, **104**
doφmrala, **108**
ϑura, **85**
ϑuraś, 43, **129**
turce, 53, **129**; ϑurce, 43, 53
ϑurial, 43, 53, **113**
Θurmna, 29
Turmś, **106**
Turmucas, **106**
ϑuśaϑur, 52, **104**
ϑuśce, 52
ϑuϑiial, **61**, 62, **140**
tuϑines, 140
to-u, **118**

Ucuniesi, 61
-um (*for* -em), 135
un, 46 and n., 68; ona, 46, **108**
unaśta, 38, 52, 54, **123**
Unatnei, *77*
unχva, 50
Uni, 43
uśa, 38, 43, 52, 64, **126**
ustvn, 52, **141**
uϑuste, utuśe, utuze, 52
uva, 57, **140**
uvlin, 45, **111**

vaχr, **127**
vanal, 48, 60, **88**, 143
vanϑ, **107**
vas, **47**
Vecaϑ, 141
Veilia, 46, 48, 54; Velia, 48
Velχe, 99
Velϑur, 85
Velus, 56, 139; Velusa, 62; Veluśla, 62
Velϑina, 129; -ś, 127, 130
Velϑur, 62
  Velϑurna, 63
  Velϑurus, 54, 62, 63 and n.; Velϑuruś, 54
  Velϑurusa, 62
Venel, 44, 54, 60, 116
  Veneles, 41, **115**
  Venelus, **115**, 116, **117**
  Venelusl, **117**
  Venilei, 44; -s, 41, **115**, **116**
verai, 44, 59, **123**
Verona, 75, 87; Veronai, 44, **58**, **90**
Vesical, 58
Vesuna, 93; Uesune, 95
vhelequ (.ḥ̤ēlicū), 34, 41, 47, 53, **123**
Vhelmus, 48
Vile, **47**, 53
Vinacna, 39, 43
Viniceu, 63; Viniciiu, 42, 115, **116**

Vinuχs, **114–15**; Vinucs, 116
Vinucenas, **117**
vinum, 33, **136**; vinm, 33, 74
Vipi, Vipinei, 93
Viśnai, 77
vi-ti-le-ra, 54, **118**

Xofer (= October), 29 n., **70**

zal, 65, 66, **68**, 104 n.; zaleśi, 66
zati, 66, 67
  zatlχne, 66, 67, 68
  zaϑrm, 67; -s, **68**; zaϑrumis, 67
zecsa, 52, **106**
zecsanśl, 62
zele, 40, 44, 59, **140**
zeri, 50 n.
ziχuce, 40, **121**, 122
zil, 60
zilaϑ, 59
zilχnu, 103
zinace, 54, **121**, 122
Zivaś, 88
zreχuva, **52**, **140**
zuci, 43, 52, **130**
zul, 43, **127**

V. VENETIC AND VENETIC INSCRIPTIONS

V. VENETIC

Venetic,[1] Latin, Siculian, Faliscan, and Etruscan form a group of sister languages, of which Venetic is the most conservative, and Etruscan the most radical. The Venetic inscriptions are found chiefly on the styluses and other school appurtenances dug up at Este. Others are on stone guideposts, boundary stones, charms, curses, etc. Pauli assumed that these objects were votive offerings and gravestones, and it is marvelous what all he could conceive to be a gravestone. As will at once be observed, we have to do with a remarkably clear and simple early Italic dialect, which, however, in Pauli's hands was turned into a mass of imaginary so-called Illyrian personal names, liberally interlarded with the assumed words for *est, hic cubat, dedit, filius,* etc. As a matter of fact, personal names are extremely rare, if they exist at all, in the Venetic inscriptions, and I cannot remember to have observed a single gravestone.

I first succeeded in reading Venetic in the fall of 1908 and presented the matter at the November meeting of the Philological Association of the Pacific Coast. I also read a paper on the subject before the American Philological Association at Haverford, December 1914, which was reported by Kent in *Indogermanisches Jahrbuch* (1916), pp. 202 ff.

VENETIC SCRIPT

1. Venetic is written penalphabetically, like Persian, Sanskrit, very early Etruscan, and some Runic; that is, while the writing was for the most part alphabetic, the vowel *a* was implied in a preceding consonant sign, unless the *a* was part of a diphthong like *ai* or *au,* in which case it was written.

2. If some other vowel followed the consonant, it was written and thus nullified the *a* implied in the consonant sign. If no vowel was pronounced after the consonant, the consonant sign was given a *virama.* In Venetic,

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[1] The best general introduction to the subject of Venetic is Conway's article "Veneti" in the *Encyclopaedia Britannica* (1911), XXVII, 986 f. It is written, practically entirely, from Pauli's standpoint (cp. *E.* 3 ff.). As Pauli dealt most extensively with the Venetic remains, it is customary to cite Venetic inscriptions by the numbers given them in his second book on the subject (*AIF.*). Later books on Venetic are: Torp, *Bemerkungen zu den Venetischen Inschriften,* Christiania (1897), 16 pp.; Danielsson, *Zu den venetischen und lepontischen Inschriften,* Upsala (1909), 33 pp.; Cordenons, *Le Iscrizioni Venete-Euganee,* Feltre (1912), 267 pp. Torp and Danielsson, like Conway, are followers of Pauli, and show no advance from his position. Cordenons is independent but equally unsuccessful.

Etruscan, and some Runic, the virama consisted of a preceding and a following dot, less often of a following dot only: thus *fϑ* spells .fata; *e·n·* = .en; *os·te·s·* = .ostes.

3. As the vowel *a* was implied only in a preceding consonant letter, the special *a*-letter (𐌀 or ᚹ) had to be written (1) at the beginning of a sentence, (2) initially, if the preceding word ended in a vowel, and (3) before another vowel-letter, lest the latter be understood to cancel the *a* implied in the preceding consonant-sign.

4. This frequent writing of the letter *a* naturally inclined scribes to write it occasionally though already implied in the preceding consonant sign. Thus *vota koe,* 'vota-que.' In some Venetic inscriptions, *a* is *always* written out. When this practice was regarded as normal, and the omission of the letter was regarded as lax, penalphabetic writing had given place to alphabetic writing. Etruscan took the step at an early day; Sanskrit never did. Virama and avagraha dots long outlived their usefulness; that is, they persisted even when *a* was no longer implied in the preceding consonant sign. A good illustration of this is Pauli's inscription No. 261.[2]

5. The *avagraha* was of like form with the virama, and was given to the vowel sign if no consonant sign preceded; that is, when initial (observe ·I·, *i,* in No. 2), and when preceded by another vowel (thus, *·s·ϑo·u·peio* = .stoupeyō). But the avagraha is frequently wanting about an initial vowel, and the virama dots sometimes surround an initial consonant.

6. Virama and avagraha dots have caused Venetologists much concern but succeeded in keeping their secret from them. It would be useless to enumerate the explanations offered, but I may stop to say that Pauli,[3] after an exhaustive but mechanical study, had no better suggestion to offer than that the dots seemed to be only a "spielerei." Conway[4] is convinced that the dots denote the old word-accent. Danielsson[5] speaks of them as *"die verwirrende Binneninterpunktion"* and omits them. Thurneysen[6] came very near the truth and almost discovered that Venetic was written penalphabetically. In the course of time, penalphabetic writing developed into alphabetic writing.

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[2] The best Etruscan illustration is the Capuan Tablet, whose countless dots mystified Etruscologists and even led Lattes needlessly to abandon his conviction that Etruscan must be an Italic language. Another good illustration is the long Narce inscription (*CIE.* 84.12), as to which Herbig says: "Puncta mira (vel omnia vel ex parte fortuita) supra infra intra litteras distincta, ex imaginibus reddidi."

[3] Pauli, *AIF.,* III, 211.

[4] Conway, "Veneti," *Encyclopaedia Britannica,* XXVII, 987.

[5] Danielsson, *Zu den venetischen und lepantischen Inschriften, Upsala* (1909), p. 6, n. 4.

[6] Thurneysen, *Woch. f. Kl. Ph.* (1892), p. 286.

7. The letter **I** has a double status. In some parts it could represent the vowel *i* or the consonant *y*(*a*). In others it was regarded as primarily a consonant sign = *y*(*a*), unless equipped with the virama, thus, ·I·. Observe -IO = *-yo,* and -I⊟A (*-iha*) = *-yā,* the intervening *h* being only a sign of the length of the following vowel (§ 10). As the letter for *i* was thus very often written ·I·, the virama dots came to be regarded as a part of the letter and in time stretched into little upright lines (ı|ı, etc.) ; which did not happen to other virama dots. Pauli's failure to recognize ·I· as the usual letter for *i* was due to the fact that he confounded it with the ·|· = *h,* which arose after F = *v.*

8. F was the letter for *v* (more exactly, the sound we write with double *v,* or *w*), but it was also often used for the corresponding voiceless sound *f* (more exactly, the sound that we write *wh*), for example, in *feines* (No. 5). But this sound was also written with a following *h,* namely, F⊟'.

9. Besides the early Greek ⊟', we find various simplifications: H (our usual form), I I, and I.[7] These two, especially the latter, led to trouble. For I was just like *y*(*a*) and sometimes is not readily distinguished from it. Moreover, F⊟' (*vh*) could be written with one of the simplified forms of *h,* thus, F I I or F I. Before a vowel it was not deemed necessary to use a virama on such a digraph; but before a consonant it was necessary. Such virama dots were, of course, put about the second, namely, the I I or I. In this way, F I became F·I·, as in ᚨ·I·D≷ᛗAI·S (No. 2); and, once in use before a consonant, it was not strange that it came to be used in any position, and so we not only had I = *h* by the side of *y*(*a*) or *i,* but also F·I· = *vh/f* by the side of ·I· = *i.* Compare the consonant *y* in English *yes* and the vowel *y* in *lyric, by,* etc., and both kinds of *y* in *yesterday.*

10. As I have said, medial *h* is not a consonant but a diacritic mark. For *h* (with or without a preceding implied *a*) served as a sign that the following vowel was long. In Umbrian the length of a vowel was indicated (*a*) by doubling it, (*b*) by writing *h* after it, or (*c*) by doubling it and writing an *h* in the middle. In German (*a*) and (*b*) are used. The various uses of *h* to express length doubtless originated in the retention of the letter *h* after the consonant had become silent and its time had passed to the neighboring vowel. The doubling of the vowel letter is extremely old, being found even in early Minoan. Indication of vowel-length is rare in Venetic except in the case of vowels in the final syllable of a word.

11. Like Etruscan, Venetic could use either T (usually in the tipped form ×) or ⊙ to spell either *t* or *d.* The former prevailed at Este, the

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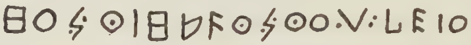
[7] Supposed by Pauli to be *u* and *i.*

latter was common about Padua. Pauli denied the existence of ⊙, taking it to be a form of O, that is, *o*. See *hostiā, fātā,* etc. K and Ψ (or Y), the χ of the Western Greek alphabets, could spell either *c* or *g* as in *gentei.* And either Π or Φ could spell either *p* or *b.*

VENETIC INSCRIPTIONS

1. **Charm** (*AIF.,* III, 56, No. 264)



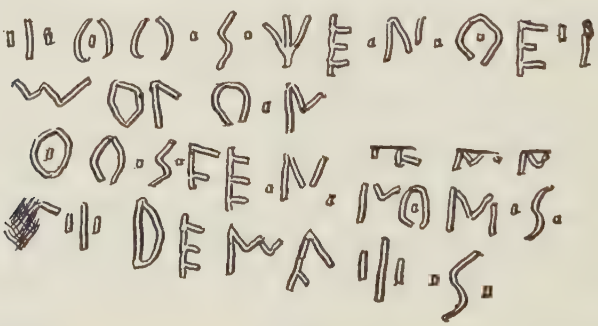
ho·s·ϑiha fϑ ·s·ϑo·u·peio
hostia fata stoupeyo
'At a sacrifice I overcome mishaps'

ho·s·ϑiha = *hostiā* is the ablative of *hostia,* the abstract noun meaning 'a slaying,' specifically 'a sacrificing' or 'sacrifice'; compare *hostio,* 'strike,' 'slay,' 'sacrifice.' In Latin, the abstract underwent the familiar change to a concrete and so got the meaning 'sacrifice' = 'what is sacrificed,' 'victim.'

fϑ = *fāta,* 'mishaps,' 'whatever might vitiate the sacrifice.' Observe that the length of the final *a* is not indicated by preceding *h*-. This is regular in the nominative feminine singular and the neuter plural, showing that Venetic had suffered the same shortening as Latin.

·s·ϑo·u·peio = *stoupei̯o,* 'cause to be struck senseless,' 'overcome,' 'destroy,' is the regular causative (with *o*-grade and *-eio* suffix, Sommer, § 318.4) of Latin *stupeo,* 'be struck senseless.' The lack of *-h-* shows the same shortening of *-ō* that we find later in Latin. The persistence of *-i̯-* shows that it is an error to infer from its loss in Latin and Osco-Umbrian that this loss was general Italic, as Buck does.[8]

2. **Guide Stone** (*AIF.,* III, 55, No. 262)



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[8] Buck, § 100.2.

iϑo·s· χe·n·ϑei mϑvo·m· ve·n·nϑois
= *Itos gentei matavom vennatos*
'Venetic road for the tribe of the Mantuans'

ve·n·nϑ ś·s· vhremais
= *vennata śasa fremais*
'Read the Venetic stones'

itos, 'right of way' or 'road' = Latin *itus,* 'right of way.' As Venetic carefully distinguishes between original *u* and original *o* (cp. *Matavom* and *Vennatos*), it is evident that in Venetic the old *u*-stem *itus* had become an *o*-stem.

gentei, 'for the tribe,' Latin *gentī.* The dative is here a dative of direction or relation.

Matavom, dissimilated form of *Mantavom* (compare *Mantianus/Matianus*). The stem evidently ended in *v,* and it is therefore older than that seen in the name of the city *Mantua.* For the preceding *a,* cp. *Genăva* and *Patăvium.* Mantua lies fifty-five miles southwest of Padua.

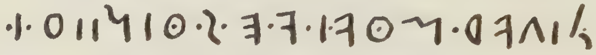
Vennatos, nominative singular masculine, agreeing with *itus; Vennata,* accusative plural neuter, agreeing with *śasa,* means 'Venetic.' The consistent spelling of this adjective with *nna* rather than *ne* is of interest and may be found important. Compare *Venonetes* (*Venones*), a tribe living northwest of Verona.

śs/śasa, by metathesis from *saśa* < *_sacsa,_ Latin *saxa,* 'stones,' here evidently inscribed pillars or slabs, containing laws or ordinances which it was important that the stranger read. The letter M represents a sharp or long *s*-sound (Latin *ss*), usually the product of the assimilation of a stop-consonant (*c, t,* or *p*) to an adjacent *s.* In this inscription we find the virama dots about the **S** of *śs,* i.e. *ś·s·.* This is evidently a slip. Final *s* is regularly written ·**S**· and occurs very frequently; so it was natural to add the dots to this apparently final *s,* just as on the one in *vhremai·s·,* exactly below. The correct spelling *śs* is found in No. 6.

fremais, 'read!,' second singular present imperative-optative of *fremo,* 'read' = Latin *fremo,* 'murmur.' The change of meaning from 'murmur,' 'unvernehmlich sprechen in durcheinander sich verlierenden Tönen,' shows that it was first applied, not to silent reading, but to the half-audible reading done by a person who is reading to himself in an undertone. *frem-,* Greek βϱεμ-, is from *_mrem-_ (Sanskrit *mar-mar-aḥ*), a grade of ˋ*mur-mur* (Latin *mur-mur,* etc.). One is tempted to regard *fremais* as from *_fremois_ (Greek βϱέμοις; Gothic *_bremais_); but I find in Venetic no trace of the Germanic change of *o, oi,* to *a, ai,* and it therefore seems more likely that Venetic *fremais* arose as a blend of an optative *_fremois_

(= βϱέμοις) with a subjunctive *fremas.* The word occurs repeatedly on the Este styluses and other school utensils, in sage admonitions as to their use.

3. Small Stone (*AIF.*, III, 409, No. 260)



·t·i uar·m· ϑvi ve·s·ϑinho·i·

Tī uaram dāvi, Vestinōi

'I have given you an eruption, Vestinus'

There are some irregularities in the writing of this text. At times we find an initial consonant sign needlessly equipped with the virama: so *·t·* here. At times we find *u* rather than *v* (**F**) for *u̯*: so *uar·m·* = *uaram/ varam* here, but *ϑvi* = *dāvi,* and *ve·s·ϑinhoi* = *Vestīnōi.* (This use of *u* for *u̯* or *w* became normal usage in Latin.) Observe that **I** has the virama after *o,* as any other vowel would (§§ 5, 7); while in other places it has not, although this form might be read *ya* (§ 7). In some texts *ah* is written or implied (*h* with no virama dots about the preceding consonant-sign) before a long vowel instead of the *h* only; so *ve·s·ϑinhoi,* without virama dots about the *n.*

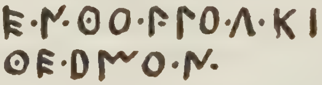
tī, 'to you,' short form probably due to the analogy of *mī* for *mihi* (Sommer's *Handbuch,* § 260).

uaram, accusative of *uara,* 'eruption,' the mate of Latin *u̯arus,* 'eruption.'

Dāvī, 'I have given,' regular perfect for that reduplicated *dedī.*[9]

Vestīnōi, 'Vestinus,' originally 'one of the Vestini,' but here evidently the name of a man, just as *Sabinus* sometimes was at Rome. Observe that the quantity of final *-ōi* is indicated but not that of *-ī-*. The assimilation of the vocative of the name to the case of the pronoun reminds one of Plautus' *Nomen Arcturo est mihi,* 'My name is Arcturus.'

4. Boundary Stone, Padua (*AIF.*, No. 257)



e·n· ϑo·l· lo·u·ki ϑe·r·mo·n·

= *En tōl loucī termōn*

'In this clearing (runs) the boundary'

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[9] Etruscan goes with Latin in retaining the older form. Thus, *tetet* (F. 2753) = *deded* (= Oscan *deded,* cp. Old-Latin *feced*), if not the still earlier *dedet.* In Etruscan this old *-d* (< *-t*) did not give way to the primary *-t* (< *-ti*), as in Latin, but became silent.

The writing is slightly peculiar. No virama is given the initial vowel *e*. The length of the vowel of a final syllable is not indicated by preceding (*a*)*h* (§ 10).

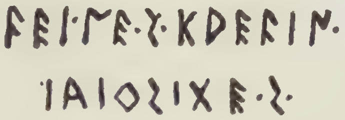
en, 'in,' is normal here with the locative preceded by a pronominal adjective. See *louci,* below.

tōl < *tōd* (in Latin *is-tō* < *is-tod), 'this.' The *-l* is due to the *l-* of the following *loukī.*

louki = *loucī,* 'in the clearing,' Old-Latin *loucī,* 'in the grove,' 'locative in *-ī* < *-e-ī,* which in Venetic and Etruscan, as in Latin, Celtic, and Doric Hittite, became a genitive. The locative in *-e-i* did not become a genitive and did not change *-e-i* to *-ī* until much later. For the same locative without the preposition, see Old-Latin *quod louci siet,* 'what is in the grove' (*CIL.*, I^2, 366), which Sommer writes me is usually explained as a possessive genitive, 'what belongs to the grove,' as the locative in *-ī* < *-e-ī* has not hitherto been recognized.

termōn, 'boundary,' 'boundary-line,' Greek τέρμων, 'boundary,' Latin *termo, -ōnis, termen, -inis,* 'boundary-line,' 'border.'

5. Boundary Stone, Lozzo, Upper Piave (*AIF.*, No. 274)



feine·s· krevin·iai os·te·s·
= *feines Careviniai ostes*
'Foreign boundaries of Carvinia'

The spelling of *i* is not consistent. **F** spells *f* as well as *v* (§ 8). Initial *o* has no virama (§ 5).

feines, 'boundaries' or 'boundary,' plural of Latin *fīnis,* 'boundary,' 'limit,' originally 'rope (put up to keep the crowd away)' = Lithuanian *geinis,* 'rope ladder,' *e*-grade of Latin **foinis* > *fūnis,* 'rope.'

Careviniai, 'of Car(e)vinia.' This appears to be a doublet of the name seen in the masculine *Carvilius.* Intervocalic *l* very often becomes *-n-* in Etruscan,[10] but I have found no trace of it in other Venetic. The territory involved is that of the Carni, and *Carnī* may be contracted from **Carvinii.* Lozzo is just south of the border as given on classical maps.

ostes, 'foreign,' nominative plural of the adjective reflected in Latin

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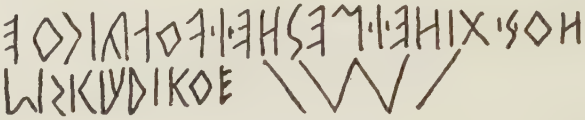
[10] See *E.*, 67.

hostis, 'stranger,' 'enemy,' English *guest,* etc. Observe the loss of the *h-* seen in *hostiā.*

6. Another illuminating northern inscription is the public notice on the pyramidal stile (*AIF.,* III, Plate 6, No. *272b*), found near Buchenstein, east of Bozen.



ho·s·tihe·i·meshe·i·votakoeśskarykoe

= *Hostyei mēsēi vōta-qe śasa carya-qe*

'Sacrificial altars and votive offerings and gravestones'

This inscription is evidently intended to warn the stranger that the spot and the objects there are sacred, and that to interfere with them would be desecration. How much more dignified is the tone of this simple statement than that of the Lydian inscriptions with their threatened curses on the desecrator. It augurs also a better, even if simpler, state of society. There is another inscription on the back of the stone, but it is partly defaced.

ho·s·tyhei/hostyēī < **hostyāi,* feminine nominative plural of the adjective **hostyos,* 'sacrificial'; compare Venetic *hostyā,* 'at a sacrifice' (No. 1, above). In this and the following word we see the *i*-mutation of *-a-*. (Compare Etruscan, *E.,* 52.)

meshei /mēsēi < *mensāi,* 'tables,' 'altars.' Compare preceding: *-yēī* < *-yāi.*

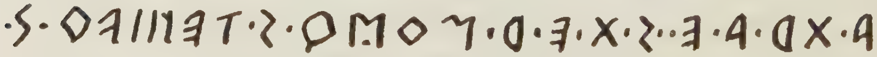
vōta, Latin *vōta,* 'votive offerings.'.

koe .... koe, Latin *que .... que,* 'and .... and.' *koe* is an attempt to spell .qe or the later .cwe. The spelling *ku* is also found (Pauli, No. 7, toward the end of the list of syllables).

śs = *śasa,* see No. 2, above.

kary = *carya,* 'pertaining to dead bodies'; compare Latin *caries,* 'decay,' etc.

7. Boundary Altar (*AIF.,* III, Plate 6, No. 267)



·a·tra·e··s·t·e·r·monyo·s·te·i·vo·s·

ad ara es(t) Termonyos deivos

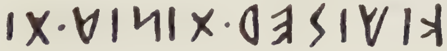
'The god of the boundary is at the altar'

·a·tra = .ad ara. At first sight this appears to be an ablative with *ad,* like the ablative with *en/in.* But the *-a* of the ablative is written regularly with a preceding *h* in Venetic, as a sign of its length. It is not improbable that we here have to do with the accusative in *-ām* with final *-m* silent, as often in Umbrian and regularly in all but the earliest Etruscan.

·t·e·r·monyo·s· = .Termōnyos, 'pertaining to the boundary,' from .termōn, 'boundary'; compare Greek τερμόνιος from τέρμων, 'boundary,' 'the god Terminus.' This interpretation assumes that the *t* of .est and the *t* of .Termonyos were both represented by one and the same letter, X, in accordance with early usage. We should not, however, expect the *t* to have the virama, nor should we expect the *e* of .Termonyos to have the avagraha, and so it is not easy to explain the dot between *t* and the following *e*. If the *e* were initial, then the avagraha would be in order. This would make our name .Ermōnyos or .Hermōnyos, which would correspond to the Latin-Etruscan form *Ermonius/Herminius* (Schulze, p. 173).

teivo·s· = deivos, Latin *dīvus, deus.*

8. **Grave Stone** (Cordenons' No. 118)



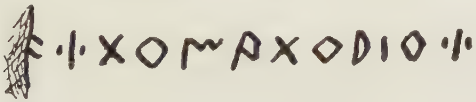
kvaiser tinia ti

'Tinia will look out for you'

kvaiser (.cwaisēr < *qaisēd), 'will look out for, provide for'; compare Old-Bulgarian *čaja,* 'wait,' 'hope,' Sanskrit *cāyatē,* 'watch,' 'observe,' Latin *quaeso/quaero.* For the liquid which is spelled *r* (< *d*), compare ř in Umbrian *ař* < *ad,* and see *tōl* < *tōd* in No. 4.

Tinia is the Etruscan Jupiter. For *ti,* see No. 3.

9. **Tombstone** (Cordenons' No. 73)



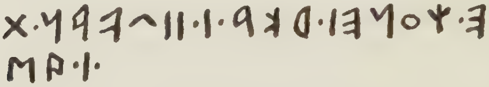
vitomatorhoi

'I escape old age'

vīto, Latin *vīto,* 'avoid,' 'escape,' with the dative as in Latin. Notice **F·I·** spelling *vi* before a consonant.

matorhoi (.matōrōi), Latin *matūrō,* here used as a neuter abstract, 'old age'; compare Latin *Matura* and other feminine abstracts in *-tura* (Brugmann, *Grundriss,* Vol. II, Part 2, § 162*e*). Such adjectives have the suffix *-ro-/-ra-* attached to a *u*-stem (*ibid.,* § 359*d*). But it is incorrect to give the combined suffix the form *-uro-/-ura-,* for the Venetic *-ō-* shows that we have to do with the *ou-* (possibly earlier *eu-*) grade of the *u*-stem.

10. Grave Stone, Este (Cordenons' No. 49)



·e·χo nei·r·kai huva·n·tśai

.egō neircāi h̤antaśāi

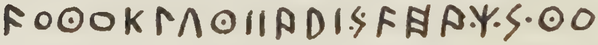
ἐγω νεκρᾳ φαντασίᾳ

'I am for the spirit of one dead'

neircāi < *neicriā, 'dead.'

h̤antaśāi or *fantaśāi* < *fantasyāi < Greek φαντασία, 'phantom.' Venetic *ś* < *sy* implies the adaptation of the Greek accent to the Venetic system.

11. Vase, Padua (Cordenons' No. 83)



voϑokluϑhari·s·vha·χ·s·ϑo

voto Clūtāris facsto

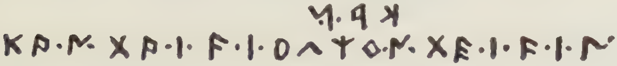
'Clutarius made (this) for a votive offering'

vōtō, Latin *vōtō,* dative of purpose.

Clūtāris, cp. Latin *Clutius, Clutorius,* etc. (Schulze, p. 150). The change of *-yos* to *-is* is regular in Oscan; cp. *Pacis* from **Pacyos,* Latin *Pacius.* The *a* implied in the *k* doubtless reflects the glide from *k* to *l,* exaggerated in the slow enunciation accompanying writing. For *ha* = .ā, see § 10.

facsto, 'made,' is a middle *s*-aorist of the stem seen in Latin *facio.*

12. Ossuary, Este (Pauli, No. 231)



ua·n·tai vhouχontei vil
= *.vantai fougontei villa*
'A dwelling place for a departing spirit'

The scribe began to write on the neck of the urn, but later decided to put the inscription farther down and so began over again. The forms of the first two words show that this text is archaic.

ua·n·tai/.vantai < .vənt-ai, 'breathing,' 'spirit,' dative participial noun; compare Greek ἄϝημι, ἄ(ϝ)εντα, 'to blow,' Latin *ventus,* 'wind,' etc. The later form with *i*-mutation of *-a-* to *-e-* appears in *vantei,* and even in this inscription in the word *.fougontei;* from which it appears that the shift was in process or but recently completed. The nominative of the word is seen in Etruscan *vanϑ,* 'spirit.'

vho·u·χo·n·tei/.fougontei, 'departing,' dative of the present participle of the verb φεύγω, Latin *fugio,* 'flee.' The earlier *fougontai,* corresponding to *vantai,* above, is also found. In Venetic the earlier *eu* became *ou,* as in Latin. That this change was not Italic, as generally held, is shown by the presence of *eu* in Etruscan (*E.,* 54).

In Venetic, as in other Indo-European languages, the *ont*-form of the participle prevailed, while the *ent*-form got the upper hand in Latin. In the course of time the Venetic participle assumed *o*-inflection. In the original of this text the *o·u·* and the virama of *n* have suffered more or less effacement.

vil/.villa, 'dwelling-house in the country,' as though one who dies and is laid at rest in the cemetery were but retiring to his country seat. Pauli's plate shows the final letter as , but on pages 44 and 408 he reproduces it as or *l.* Cordenons (p. 168) gives , which he believes stands for .

VENETIC WORD LIST

[References are to numbers of inscriptions in which the words occur. When the vowel *a* is not written but is merely implied (as explained in paragraphs 1–4 of the text), it is printed in italics. In ordering the words, the Greek letters χ and ϑ have been merged with *k* and *t* respectively.]

at-*a*ra, 7
est, 7
eχo, 10
en, 4
f*a*ϑ*a*, 1
feines, 5
hosϑiha, 1
hostihei, 6
huvantśai, 10
iϑos, 2
kari*a*, 6
k*a*reviniai, 5
χenϑei, 2
kluϑharis, 11
koe, 6
kvaiser, 8
louki, 4
m*a*ϑ*a*vom, 2
matorhoi, 9
meshei, 6
neirkai, 10
ostes, 5
ś*a*s*a*, 2, 6
sϑoupeio, 1
ϑ*a*vi, 3
teivos, 7
ϑermon, 4
(t)ermonios, 7
ti, 3, 8
tinia, 8
ϑol, 4
uantai, 12
u*a*ram, 3
vennaϑ*a*, 2
venn*a*ϑois, 2
vesϑinhoi, 3
vhaχsϑo, 11
vhouχontei, 12
vhremais, 2
vil*a*, 12
vito, 9
vota, 6
voϑo, 11

GENERAL INDEX TO VOLUME V

GENERAL INDEX

[Reference here is to volume pagination (bottoms of pages)]

Abbreviations, 24, 102, 137, 197
Acrophonic writing, 34–35, 78–79; limitations of, 36, 37
Alphabet, theories of, 28 ff.
Alphabetic writing, development of, 41 ff.
Amenophis III, 160
-ānus, -āna, 110–11, 119
Anau, excavations at, 122
Apollo/Sapello, 283
Assessos, 126, 135 n. 77, 136
Athenae, 130 n. 66, 273 and n. 26
Avagraha, 11, 41, 344

Borrowing, influence of, on evolution of writing, 33, 35 n. 25
Bull-god, Hittite, 74 and n. 3

Capuan tablet, 298
Capuan vase, 299
-ce/-ke, past tenses in, 147, 207–8
Cha-at-ra-a-š, Chat-ra-a, cuneiform names for Pteria, 175, 180, 182, 183
Clay tablet, Minoan, 89 ff.
Crete, 73 ff.; influence of, 131–33; its name probably cognate with 'Pteria,' 134
Croesos, 108
Cuneiform writing, 37, 141–42, 154–59
Cybele, 74
Cyprian writing, 37–38; its limitations, 37 n. 27; Etruscan inscription in, 303

Demeter, 74
Determinatives (in cuneiform writing), 156
Diphthong *oi,* development in Germanic and Italic, 231 n. 4
Dividers (to mark end of word), 159; Minoan, 78, 84, 85, 87
Dorians, 76–77, 107, 110
Doric Hittite, 106 ff., 137–52

-ēnē, place names in, on Greek mainland, 130

Etruscan, *see* "Table of Contents," 195–96, "Word List," 333
Etruscan, study of, 12–13, 202 ff.
Etruscans, history of, 268 ff.

Forms of letters, 53–68; **| |** = *e,* 299, 310; forms of **H** and **|** in Venetic, 345; **O** in Etruscan, 215; *see* Phonetic values
Gaea, 74, 88
Greco-Phoenician alphabet, influenced by cuneiform, 29; forms of the letters ultimately derived from Minoan, 46, 53–62; does not represent the system of writing in which the alphabetic principle first prevailed, 43–44
Greek alphabet, a simplification merely, 42 and n. 32; relation to Phoenician, 46 ff.; conservative traits in, 47, 49
Greek letter-names, Semitic influence on, 50

ḫa-at-ra-ai = *Qatrai,* 110; *see* Pteria
Hempl, George, Memoir of, 9–18; bibliography of his publications, 19–23
Hieroglyphic writing, 34 n. 23
Hippa/Hippe, 108
Hittite Doric, 137–52
Hittite Word List, 184–86
Hittite writing, pictographic, 16–17, 105, 133 n. 70; cuneiform, 141, 154–59
Hittites, their racial character, 119–21; their route, 109 ff.; traced by place-names, 110–19; and by pottery, 114, 122, 134; possible relation to Minoans, 133–34

Iconomatic (acrophonic) writing, 35
Ideograms, 36 n. 25; in cuneiform, 155, 158
Ideographic writing, 33–35 and n. 25
Implied vowels, *see* Syllabic writing
Ionic dialects, 124–28
Ionic shift of *ā* > *ē,* 42, 44, 127
Italic dialects, 332

Italic tribes, prehistoric wanderings of, 331–32

Javan, 110, 128
"Javonian," 108–9
Javonian Greeks, 110, 125, 128, 131 ff., 331

Κρήτη, etymology of, 134

Labiovelar consonants, 133–34 and n. 74, 167–68, 234–36
Lappaios, 107, 110; Song of, 178 ff.
Lemnos Stone, 264–78
Letter of King Amenophis III, 153 ff.
Letters, *see under* Forms; Names; Order; Phonetic values

Μαδοι/Μῆδοι, 126–27
Magliano Tablet, 318
maro, 270–71
Mēdān, 126, 130; *Mēdān/Midan*, 108
Minoan religion, 73–74
Minoan seals, 73–95
Minoan writing, 77–78; reasons for believing the language Greek, 15–16; interpretations, 82–90; numerals, 95
Minoans, 74; their history, 75–76; were Javonian Greeks, 75, 129 ff.; perhaps akin to the Hittites, 123 ff., 134
Mummy manuscript, 319

Names of letters, 43 ff.; Greek names, 51; relation of the Ionic shift of *ā* > *ē* to letter-names, 42, 44–45, 46; Western Greek names, 65; Greek and Phoenician, 43; influence of cuneiform, 50; unmeaning names in Phoenician, 51; Hebrew names, 51; *'alf*, 49; *'ayin*, 49; *gēm/gamma*, 50; *lam/lambda*, 50; *mū*, *mēm*, 43, 45; *nū*, *nūn*, 45; *rōš/rēš*, 46; *samech/sigma*, 50 n. 42; *san*, 47–48; *tau*, 47; *tsade*, 47–48; *wau*, *wē*, 47; *zayin/zeta*, 47–48
North Italic alphabets, 10–11

Obscure vowels, 229
-*ōna*, Italic words in, 280 n. 8
Opos, 80–81, 93

Order of letters in the alphabet, influence of cuneiform on, 29; order in Western alphabets, 65, 66 n. 55; shifts in the Semitic order, 47

Penalphabetic writing, origin and nature of, 39–41; Venetic, 343
Perusian Cippus, 312
Phaestos Disk, 14, 135 and n. 77
Philistines, 132, 135 and n. 77
Phoenician alphabet, influenced by cuneiform, 29–30; *see* Greco-Phoenician alphabet
Phoenicians, their rôle in the history of the alphabet, 46, 66; not the first to use letters alphabetically, 46
Phonetic complements, 156
Phonetic transcription, 216 ff.
Phonetic values of letters, relation to their original names, 65–66; voiced consonants not distinguished from voiceless nor pure from aspirate, 16, 45, 51–52, 65, 213; **Y** and **F** confused in Semitic, 47; the digraph *vh* in Venetic, 345; **B**/**8** = *f*, 213 and n. 1, 310; Θ = *h̤* in Gothic, 267 n. 5; *s*, *ś*, and *z*, 237, 238, 267, 347; Ι and ǂ, 48; Ι confused with 𐤑, 47–48; Φ = *h̤*, 267 and n. 5; ⊞, +, **X** = *cs*, 310
Phonetic writing, 36
Pictograms, index to Minoan, 90–95
Pictographic writing, 33–35; Minoan, 78–79; Hittite, 105–6, 133 n. 70
Place names, 110 ff., 130 and n. 66, 273 and n. 26, 280–81
Plurals in -*r*, 209 and n. 31
Praesos inscription, 293
Proto-Ionians, 128
Pteria, 107, 108, 110, 133; spelling in pictographic Hittite, 133 and n. 70; in cuneiform, see *Cha-at-ra-aš* and *ḫa-at-ra-i*

Qatrai, etc., 133; *see* Pteria

Rheia, 74
Roma, 329–30
Rudra, 282, 283, 284
Runes, 10; Burgundian, 12

Sapalulu, 107, 283
Sapello/Apollo, 283
Seals, Minoan, 79–80
Serona, 279–81
Silphium, 80, 94
Sinai inscriptions, 32 n. 20
Siva, 282–84
Stress, "shifting" of, 222 n. 28
Suppiluliuma, King, 107, 283
Supplementary letters, 42 and n. 32, 63–68
Syllabic writing, 14 and n. 13; kinds, 37; Cyprian, 37 ff., 40; other systems, 38, 42 n. 32; implied vowels in, 41 and n. 31, 43–44

Tarcondemus seal, 106
Telibinuś, 107
Tell el Amarna texts, 153
Tešup/Theseus, 74, 108 n. 4, 175
Tocharian, 130
Trilingual Glossary, 140
Turkestan, Hittites in, 38, 114 n. 21, 115, 122–23

Virama, 11, 41 and n. 31, 343
Voiced and voiceless consonants, *see* Phonetic values
Voicing of consonants in weak position, 147 n. 15
Vowels and consonants, 218–19

"White Syrians," 108
Writing, kinds of, 33 ff.

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